



International

GREENLAND AND IRELAND CONSIDER EXTENDING TERRITORIAL FISHING LIMITS: A report from Copenhagen states that the Danish Government is considering a tightening of restrictions on foreign trawlers fishing in the Greenland area. Since Iceland extended her fishing limits, British trawlers have been fishing Greenland waters to an increasing extent, according to the Fishing News of November 29, a British trade periodical. However, a Greenland Fisheries Department biologist believes that it would be of no use to extend the Greenland territorial limits since most fishing takes place beyond any possible limit extension.

The Irish Republic is reported to be likely to follow the example of Norway in seeking permission from the International Court of Justice to extend the three-mile limit of its territorial waters to protect Irish fisheries from British and other trawlers.



Canada

TUNA FISHERIES: The tuna fisheries of Canada consist mostly of catches by vessels normally engaged in other fisheries. Canning is done in plants incidental to the handling of other species of fish, reports a January 7 dispatch from the U. S. Embassy at Ottawa. Tuna occurring in commercial quantities in Canadian waters are of two species. On the Pacific Coast the catch is made up of albacore (Germo alalunga) generally taken by trolling with red-feather lures. The catch is then frozen for subsequent canning. On the Atlantic Coast the tuna catch is made up almost entirely of bluefin (Thunnus thynnus). Other varieties of tuna (yellowfin, skipjack, etc.) are imported and canned in Canadian plants.

Tuna occurring in commercial quantities in Canadian waters are of two species. On the Pacific coast the catch is made up of the albacore (Thunnus alalunga), which is sometimes referred to by fishermen as the tuna or long-finned tuna. It is generally taken by trolling with red feather lures and is frozen for subsequent canning. On the Atlantic coast the catch, taken by trap net or by sports fishermen using lures, is made up almost entirely of the species Thunnus thynnus, which is also referred to as tuna, albacore, or bluefin.

British Columbia Fishery: The tuna fishery in British Columbia is not regarded as a large one, although in some years fairly large catches have been taken (table 1). Because of the uncertainty of the catch, very few boats are equipped exclusively for tuna fishing; most of the boats that do catch tuna are also engaged in some other fishery.

Vessels fishing commercially for tuna on the Pacific Coast are usually over 40 feet in length--large trollers, long-line boats, draggers, and seiners. It has

been estimated that the extra gear required for tuna fishing costs from C\$400 to C\$500 per vessel. There are four or five vessels in British Columbia specializing in tuna fishing, and if no tuna are available in British Columbia waters these craft fish in the offshore waters off the California and Oregon coasts.

Canning facilities for tuna in British Columbia are the same as those for salmon, and all plants are therefore able to can tuna with minor alterations in

Table 1 - British Columbia Tuna Catch, 1946-51

Year	Quantity	Landed Value	Avg. Price Per Lb.	Boats Licensed
	Lbs.	C\$	C¢	No.
1952	156,600	30,000	19.2	-
1951	189,500	33,161	17.5	96
1950	2,114,300	372,711	17.6	117
1949	2,230,800	362,596	16.3	124
1948	2,175,000	598,387	27.5	119
1947	796,500	211,650	26.6	92
1946	431,600	85,113	19.7	84

tuna loins from Japan instead of the whole fish.

In addition to the canned pack of tuna from Canadian-caught fish shown in table 2, the amount canned from imported Japanese tuna is shown in table 3.

In 1948, the Canadian Department of Fisheries maintained special tuna patrols to advise fishermen when and where tuna were available. Since then, while no special patrols have been kept up, any information gathered in the course of regular patrol duties of departmental boats has been passed on to the fishermen.

While the British Columbia tuna catch has not been large during the past two years, there is always the possibility that conditions in future years might provide a fishery at least equal to that of the period from 1948 to 1950. If the tuna are present they provide work for vessels, such as halibut long-liners during the periods when that fishery season is closed. Salmon trollers also can supplement their income with tuna catches.

Of the total Canadian catch in 1948, it was estimated that 45 percent was caught off the west coast of Vancouver Island, 50 percent off the Queen Charlotte Islands, and 5 percent off the coasts of Washington and Oregon. In 1949, 75 percent of the catch was reported caught off the west coast of Vancouver Island and the remainder off the coasts of Washington and Oregon.

Table 3 - British Columbia Canned Tuna Pack from Imported Japanese Tuna, 1950-51

Year	Pack	Value	Avg. Price/case
	Std. Cases	... (f.o.b. plant) (f.o.b. plant) ...
		C\$	C\$
1951 ..	51,823	1,583,812	30.55
1950 ..	12,310	358,765	29.15

NOTE: NO TUNA WAS CANNED FROM JAPANESE IMPORTED TUNA IN 1948 AND 1949.

procedure. However, only three companies actually engaged in this operation in 1950. When only a small quantity of Canadian tuna is available, United States- and Japanese-caught tuna are imported. Preliminary information for 1952 indicates that more than 48,000 cases (48 7-oz. cans) of foreign-caught tuna were canned in British Columbia up to the end of October. An effort has been made to reduce costs by importing

Table 2 - British Columbia Canned Tuna Pack, 1948-51^{1/}

Year	Pack	Value	Avg. Price/case
	Std. Cases ^{2/}	... (f.o.b. plant) (f.o.b. plant) ...
		C\$	C\$
1951 ..	1,457	49,538	34.00
1950 ..	18,575	555,957	29.95
1949 ..	15,254	430,674	28.25
1948 ..	20,248	783,103	38.70

^{1/}PACK FROM TUNA CAUGHT BY CANADIAN BOATS--IMPORTED TUNA NOT INCLUDED.
^{2/}48 7-OZ. CANS PER CASE.

Atlantic Tuna Fishery: The tuna fishery of Nova Scotia may be considered under two classifications--the commercial fishery and the sport fishery. The product of the sport

kilogram (2.2 pounds) of fish. These provisions were included in Decree 5239 of December 26, 1952, issued by the Chilean Bureau of Public Health and printed in the Diario Oficial de la Republica de Chile on January 14, 1953. Failure to comply with the terms of this decree will subject the shipper to the penalties provided in the sanitary code of the country, reports a January 19 U. S. Embassy dispatch from Santiago.



Colombia

IMPORT RESTRICTIONS ON CANNED FISH LIFTED: Canned or preserved fish may now be imported into Colombia from any source. Decree No. 8 of January 7, 1953, eliminated the requirements of Decree 1830 that imports of these products were limited to countries to which exports of certain listed items were made. The restriction was lifted because many countries to which Colombia exports these special items are not producers of canned or preserved fish, states a January 16 U. S. consular dispatch from Bogota.

NOTE: ALSO SEE COMMERCIAL FISHERIES REVIEW, OCTOBER 1952, P. 59.

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TUNA FISHERY: Tests to determine the potential tuna fishery off the Colombian coast will be carried out in the near future by a Barranquilla fish-canning firm. A modern United States west coast-type purse seiner will be used, reports a January 2 U. S. consular dispatch from Barranquilla. Arrangements have already been made with a private vessel captain from Balboa, C. Z., to make a reconnaissance of the area off Santa Marta by mid-January, if a fishing permit can be obtained for the captain from the Colombian Government.

The tuna catch is sold locally for consumption as fresh fish, except for the small quantities which have been purchased the past two years for canning. During the 1953 season the Barranquilla cannery intends to can as much of the catch as possible, and the new canning plant at Santa Marta will presumably also be in the market for tuna.

Tuna and bonito are not fished with hooks in Colombia, and the whole catch is made with nets near the beach in about 8 coves between Santa Marta and the neighboring hamlet of Taganga, where the ocean floor drops steeply away from the beach line. The method used, apparently dating from pre-Colombian times by the Indian coastal inhabitants, is as follows: a cove is partially closed off by a net running from the beach at one end out into the water for about 200 feet toward the opposite tip of land. The net is supported by floats and canoes and extends downward $6\frac{1}{2}$ to 10 feet weighted by sinkers. A lookout on a hill above the cove watches for an approaching school of fish (tuna, bonito, or mackerel). When the school is inside the closed end of the cove, the lookout signals and a number of fishermen disturb the water behind the fish while others haul the outboard end of the net in to shore. From 5 to 6 metric tons of fish have been caught in one day by this primitive method in the three coves nearest Santa Marta. Often as much as one ton is caught at a time. The fish are reported as being very plentiful there during the seasons, which are February, March, and April for albacore and bonito, and January and February for mackerel.

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FISH-CANNING INDUSTRY: Expanded markets, increased demand, limited capacity and quarters, and limited fish supplies are the problems facing Barranquilla's only fish cannery after two short years of operation, according to a December 12 U. S. consular dispatch from that city. This cannery commenced operations in 1950. Originally fish was canned only incidental to other products, but now it comprises the bulk of the plant's output. New and larger quarters will be occupied by the cannery in the near future.

It is hoped that the introduction of modern methods and equipment in the local fishing industry (where the most primitive conditions still prevail) will solve the supply problem. By supplementing the existing fleet of fishing canoes with a large boat of the Pacific purse-seiner type, and the gradual conversion of the industry to up-to-date methods, the supply of fish can be increased.

Daily production in a recent six-months period has averaged between 3,000 and 4,000 15-oz. oval cans of sardines and mullet. A 50-percent increase in production is expected in January 1953, when more machinery will be installed. Over 100 persons are now employed in the cannery and two shifts per day are operated. At the present time about 80 percent of the production is mullet, the most popular canned fish in Colombia, and 20 percent sardines (herring). However, from time to time and as available, bonito, mackerel, and shrimp are packed. The shrimp are packed dry, the bonito is put up in vegetable oil, and the others are packed in tomato paste. All ingredients are obtained locally. Since cans of the required quality are not available from local manufacturers, all are imported from the United States. Recently the Colombian Government reduced the import duty on oval cans.

Bonito canned at Barranquilla in 1952 totaled only about 100 cases and in 1951 about 500 cases. It carries a bilingual label reading "Atun (Bonito) - Bonito Tuna Style." This light pack was not due to a scarcity of bonito, but rather by preoccupation with other species--mullet and sardines. It is reported that blue-fin tuna, bonito, and mackerel do occur in Colombian waters in commercial quantities.

At the present time between 2 and 3 metric tons of fresh fish are received at the plant each day, purchased through the firm's buying offices in Barranquilla and the neighboring towns of Cartagena, Galerazamba, Santa Marta, Isla del Rosario, and Cienaga. The six suppliers purchase in turn from an estimated total of about 300 individual fishermen who work with small throw nets from dugout canoes. The cannery has found it exceedingly difficult to maintain a regular supply in excess of the 2 or 3 tons per day, but it is confident that the waters off Colombia will readily yield far greater returns to modern equipment. Prices currently paid by the cannery for fish are 38 centavos per kilo (6-3/4 U.S. cents per pound) for mullet and sardines, one peso per kilo for shrimp (18 U. S. cents per pound) and from 1 1/2 to 2 pesos (60-80 U. S. cents) per fish for tuna, depending on size.

Fish are transported to Barranquilla by launch, packed in ice, and upon receipt at the plant they are sealed, cut, washed, and packed in the cans by hand; then precooked by steam. After precooking the mullet, the open cans are removed from the cooker and the large backbones are removed by hand. After tomato paste has been added by hand, the cans are placed on a conveyor and passed through an exhaust box to the closing machine, then into a sterilizing retort. After cooling and removal from the retorts, the cans go to the shipping department for labelling and packaging. The finished product is held briefly for observation and regular laboratory tests are made of samples.

The plant's output presently goes to four exclusive wholesale distributors located in Bogota, Medellin, Cali, and Barranquilla. Table 1 gives factory prices to wholesalers.

Species	Size of Case	Price per Case	
		Pesos	US\$
Sardine or mullet	48 15-oz. oval	60	24.00
Sardine or mullet	100 5-oz. cyl.	50	20.00
Tuna (bonito) in oil ..	48 7-oz. cyl.	76	30.00
Shrimp, dry pack	48 5-oz. cyl.	84	33.50

Canned fish were included on the list of articles prohibited from importation into Colombia under Decree 637 of March 20, 1951. However, regulations recently issued under authority of Decree 1830, of August 1, 1952, authorize the importation of canned sardines and other fish through utilization of special "import rights" acquired through the sale of specified Colombian products in the country of origin of the canned fish, and available to the public at a considerable premium over the official exchange rate. It reportedly costs about 75 pesos (US\$30.00) to import a case of sardines similar to those packed in Colombia and sold to distributors for 60 pesos per case (US\$24.00). It is still too early to define the full effect of the new regulations on the canned fish trade in Colombia.

Prior to 1950 no canned fish was produced in Barranquilla, and a close indication of the market then enjoyed by the article is given in the table of imports (table 2). The sharp decline in 1949 is accounted for by adoption of severe import restrictions by the Colombian Government at that time.

So far as can be determined, there is only one other fish cannery in Colombia, at Santa Marta, which announced it was commencing to can fish on July 15, 1952.

Although detailed data on this firm are not available, its output is believed to be small but growing.

Table 2 - Colombian Imports of Fish Conserved in Oil or Sauce, 1946-49

Year	Net Weight	Value c.i.f.	
	Lbs.	Pesos	US\$
1949	320,500	154,722	61,600
1948	2,455,100	1,188,581	473,500
1947	4,448,800	2,717,556	1,082,700
1946	1,395,000	934,464	373,000

It is evident that with continued government protection the fish-canning industry has reasonably bright prospects, except for the fundamental limitation which must now be overcome if further progress is to be made--the primitive condition of the country's small fishing industry.

condition of the country's small fishing industry.



Egypt

FAO TO PROVIDE TECHNICAL ASSISTANCE FOR FISHING INDUSTRY: Two fishery experts--one statistician and one technologist--will be provided the Egyptian fishing industry by the United Nations Food and Agricultural Organization (FAO) in an agreement signed with the Egyptian Government on December 20, 1952. Also to be provided by the agreement for technical assistance for the fishing industry will be one scholarship for an Egyptian to study fish salting and sardine canning in a foreign country, states a December 27 dispatch from the U. S. Embassy at Cairo.



Japan

"LETTER OF ASSURANCE" STILL REQUIRED FROM U. S. FROZEN TUNA IMPORTERS: United States importers of Japanese frozen tuna must continue to submit a "Letter of Assurance" to the Japanese Government, states a U. S. Embassy dispatch from Tokyo. However, a flexibility in wording now permitted will meet at least part of the objections raised by some importers to the statements in the Japanese Government form. The sample letter issued in October 1952 was merely intended as a guide in preparing "assurance" statements. "Assurance" statements will be acceptable if they are worded in accord with the intent of the requirement as stated in the form issued. The importers may specify time periods and kinds of tuna applicable to their "Letters of Assurance."

NOTE: ALSO SEE COMMERCIAL FISHERIES REVIEW, NOVEMBER 1952, PP. 38-9

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FROZEN TUNA EXPORTS TO U. S. INCREASE: Japanese exporters of frozen tuna are showing increased activity in procuring fish for shipment to the United States in accordance with existing limitations, reports a January 5 U. S. Embassy dispatch from Tokyo. As of December 17, 1952, 16,785 tons of the 18,000-ton quota have been authorized for export to the United States for the period April 1, 1952, to March 31, 1953.

The first landing of this winter's albacore (about 56,000 pounds) was made on November 25, 1952, at Yaizu, one of the leading tuna ports. Ex-vessel prices are reported high for top-quality fish for export. Early landings of albacore were sold at ex-vessel prices ranging from 260 to 400 yen per kan (6 to 9 U.S. cents per pound), with the higher-priced fish selected for export. On December 15, 1952, the highest price for albacore at Shiegama, a leading tuna port in northern Japan, was 470 yen per kan (11 U.S. cents per pound).

At the end of November, exporters were reportedly offering albacore at US\$315 to US\$325 per metric ton, f.o.b. Japan, with the hope that the price would rise to US\$335 per ton as the remainder of the export quota on winter-caught tuna is filled.

As of mid-December, tuna stocks on hand for export were estimated at 300 metric tons, presumably mostly albacore.

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CANNED CRAB MEAT EXPORTS: Japanese exports of canned crab meat to all countries January through September 1952 amounted to 57,570 actual cases, according to the Japanese Fisheries Agency. Estimated exports for October-December 1952 were 25,000 actual cases, making an approximate total of 82,570 actual cases for the year 1952. Of this amount, an estimated 70 percent, or 57,000 actual cases, were exported to the United States. Cases consist of 48 No. 2 cans (6½ oz. per can); however, included are a few cases with 96 No. 2 cans (6½ oz. per can) and 48 No. 3 cans (3¼ oz. per can).

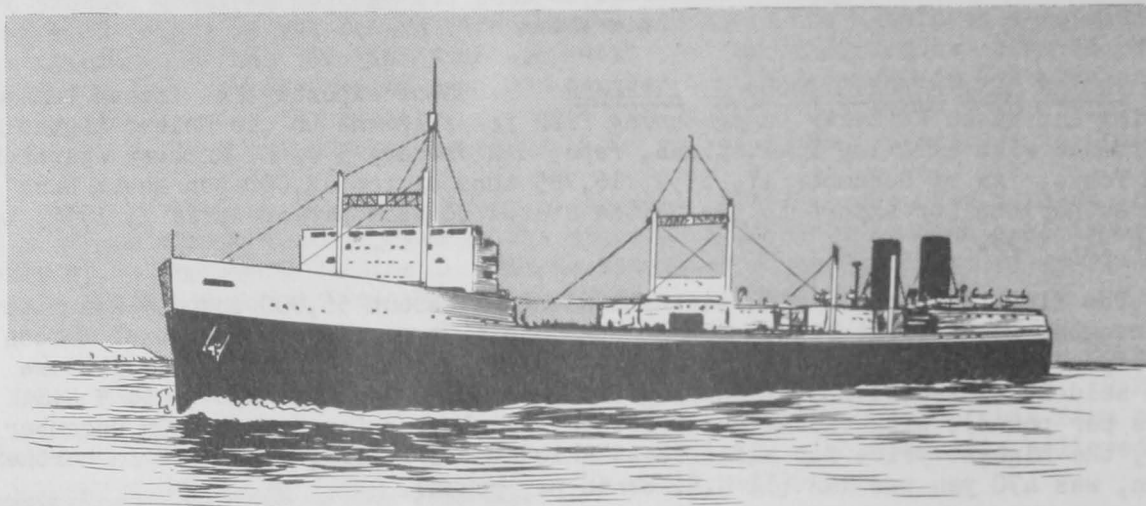
The Japanese canned crab meat pack in 1951 amounted to 192,871 actual cases. Of this amount, 103,187 actual cases, or 53.5 percent, were exported. Of the amount exported, 93,900 cases were shipped to the United States, 3,096 cases to Hawaii, 3,096 cases to European countries, and 3,095 cases to other countries (including the Far East).

Although the Japanese Government has issued no official statement on final plans for the 1953 factoryship crab-fishing operation in the Bering Sea, news accounts have recently reported that it will consist of one mothership (5,000 to

6,000 gross tons) with 20 catcher boats. The period of operation will be April to August in Bristol Bay, reports a January 21 U. S. Embassy dispatch from Tokyo. Production for this expedition is estimated at 50,000 cases (48 6½-oz. cans) of canned crab meat.

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WHALING EXPEDITIONS DEPART FOR ANTARCTIC: Two Japanese Antarctic whaling expeditions for the 1952/53 season sailed from Japan in the late fall, states a December 23 U. S. consular dispatch from Kobe. The first, a fleet of 24 vessels with Nisshin Maru (17,600 gross tons) as mothership, left Yokosuka late in November. A slightly smaller fleet composed of 21 vessels departed from Japan in several sections which are to reunite in the Antarctic, where it will be headed by



TONAN MARU, MOTHERSHIP ON JAPANESE ANTARCTIC WHALING EXPEDITION, 1952/53.

the mothership Tonan Maru (19,600 gross tons). This fleet includes 11 catcher boats, 3 trawlers, 1 whale-spotting boat, 1 tanker, and 4 refrigeration ships. The Tonan Maru departed Osaka December 1, and the other vessels in the fleet departed between the middle of November and December 9.

City banks have supplied ¥2.5 billion (US\$6.9 million) to support the two whaling expeditions, ¥1.2 billion (US\$3.3 million) to the Tonan Maru expedition and the remainder to the Nisshin Maru expedition. The loans are guaranteed in a sense by the decision of the Japanese Government to buy whale oil worth ¥2.5 billion (US\$6.9 million), provision for which is expected to be made in the current supplementary budget.

A goal of 1,748 blue whales has been set for the two fleets--200 more than in the previous season, but only 90 sperm whales as compared to 961 in 1951/52. This reduction in the goal for sperm whales is due to the low demand and large stocks on hand of sperm whale oil. The Tonan Maru share of this goal is 40 sperm and 848 blue whales, the remainder is for the other expedition.

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SOVIET UNION WILLING TO PERMIT JAPANESE FISHING OFF KAMCHATKA: If the Japanese Government formally requested it, an official of a Soviet Mission in Tokyo recently declared that Russia would permit Japanese fishing operations in the open

sea off Kamchatka as in prewar days. This information is attributed to several well-informed sources and was reported by the Japanese press (Kyodo, January 9).

In prewar days Japan engaged in highly productive salmon and crab fishing in the general area of Kamchatka. The 1952 Japanese salmon expedition operated in the waters considerably farther off the Kamchatka coast than the location of prewar operations. There have been reports from time to time that Japanese fishing interests would like to move in closer.

PRIVATE FIRM SIGNS FISHING AGREEMENT WITH TWO COMMUNIST-CHINESE FIRMS: A Tokyo firm is reported to have concluded a private fishing agreement with two Communist-Chinese companies to trawl for fish in Chinese territorial waters, stated a December 16 dispatch from the U. S. Embassy in Tokyo. The area to be fished includes the Gulf of Chihli, the Yellow Sea, and East China Sea. It is understood that the agreement calls for the use of 10 trawlers (average 50 gross tons each) with all necessary personnel, vessels, equipment, and supplies provided by the Japanese company. The catch will be landed in Tientsin and Tsingtao in Communist China, and Shimonoseki, Nagasaki, and Hakata in Japan.

The agreement also provides for: (a) a guaranty of safety to the Japanese vessels and crews by Red China (it is reported that the Chinese companies will deposit US\$158,000 in a Hong Kong bank as security on this guaranty); (b) division of the proceeds of sale of the catch would be 87 percent to Japanese ship-owners, 5 percent to the Japanese trading firm, and 8 percent to the Chinese interests.

The Japanese fishing vessels are subject to Government licensing regulations that permit fishing only in specified areas, which at present do not include Communist-Chinese territorial waters. No official statement has been made by the Japanese Government regarding the venture.

There is much interest and speculation in many circles in Japan regarding the outcome of this business agreement between an agency of Communist China and private Japanese business interests.

JAPANESE GOVERNMENT



Mexico

CUBAN AND U. S. VESSELS ACCUSED OF STEALING CAMPECHE SOUND SHRIMP: A front-page story in the Mexican newspaper Excelsior (February 10) accused United States and Cuban vessels of stealing shrimp in Campeche Sound. The article (under the headline "300 Cuban and American Pirate Boats Stealing Shrimp in Campeche Sound") says that the National Chamber of Fishing Industry "denounced yesterday the sacking of our shrimp wealth by 300 pirate boats of Cuban nationality, and especially North American, and that the boats are lying as near as 1,000 meters from the wharfs at Ceiba Beach about 30 kilometers north of Campeche and are fishing in Mexican territorial waters."

Indications point to the possibility that this denunciation by Mexican shrimp interests will be used as an excuse for a raid on American shrimp boats and their detention by the Mexican authorities.

GUAYMAS SHRIMP FISHERY CONTINUES TO DECLINE: The Guaymas shrimp fishing industry continued its downward trend in December 1952 when only 275 metric tons were landed at that port, states a January 16 U. S. consular dispatch from Guaymas. This is an average catch of less than one metric ton per vessel for the month. Shrimp shipments during the last three months of 1952 amounted to 1,029 metric tons (within 50 to 60 tons of amount landed). Roughly twice that amount was shipped during the same three months of 1951.

A diminishing number of shrimp operators believe that this trend is only temporary and the lack of shrimp in local waters is due to a cycle disappearance. However, most operators believe that the decline is due to the lack of conservation measures.

A group of prominent Guaymas shrimp operators flew to Mexico City early in December to interview the newly appointed Minister of Marine. The group returned



ONE OF THE LATEST MEXICAN SHRIMP TRAWLERS.

somewhat heartened by promises of new restrictions on bay shrimping, including removal of the "tapos" or barriers erected by canoe fishing interests at the mouths of bays, reserving for their exclusive use those waters where the shrimp develop. At the same time the Minister was reported to have tentatively approved a plan to prohibit bay fishing of any sort until October 1, 1954.

The operators also asked that a moratorium be granted on the 5-million-peso (US\$578,000) loan made to the shrimp interests in 1952 by the Financiera Nacional. They were promised the request would be

taken under advisement; but the outlook is said to be unfavorable.

Though these measures might moderate the downward trend, it is believed any beneficial effects deriving therefrom will be felt too late to save many of the more marginal operators from dissolution. Should the moratorium not be granted, it would appear that attachment proceedings would soon follow in the cases of the more heavily indebted boat owners.

It is reported that the population of Guaymas is decreasing for the first time since shrimp became the community's chief industry.

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SINALOA SHRIMP INDUSTRY TRENDS, OCTOBER-DECEMBER 1952: Shrimp exports to the United States from the province of Sinaloa, Mexico, during October-December 1952 were below those for the similar period of 1951, according to a U. S. consular dispatch of January 15 from Mazatlan (see table).

There is some difference of opinion as to the reason for the scarcity of shrimp off Sinaloa. Some blame it on the wasteful methods of trapping with weirs in Escuinapa: at the request of a committee of Sinaloa industrialists, the Ministry of the Navy agreed to have the weirs removed in May 1953. The results of the removal of these traps, if it takes place, will not be known until next season.

Reports at the end of December indicated that good catches had been made in the Bay of Magdalena, Lower California.

Sinaloa Shrimp Exports to U. S., October-December 1952		
Port	Oct.-Dec. 1952	Oct.-Dec. 1951
	Lbs.	Lbs.
Mazatlan	2,743,795	2,264,380
Topolobampo ..	1,814,770	2,724,750
Escuinapa	-	146,822
Total	4,558,565	5,135,952



Nicaragua

CONCESSION FROM GOVERNMENT REQUIRED FOR FOREIGN VESSELS FISHING IN NICARAGUAN TERRITORIAL WATERS: In order for foreign companies or vessels to enjoy free-entry privileges and to be able to fish in Nicaraguan territorial waters, it is necessary to obtain a concession from the Nicaraguan Government by means of a contract. This procedure will be necessary until laws projected by the Executive Power are approved by the Nicaraguan Congress. Although there are several laws now in effect which cover various phases of foreign investment in Nicaragua for agricultural or industrial production, use of international exchange, and special exemptions for foreign investors or companies, none seems to apply to fishing or fishery enterprises.

A law entitled "General Law on Concessions for the Exploitation of Natural Resources" is now before the Nicaraguan Congress to cover foreign investors and permit the free disposition by the investor of 50 percent of the foreign exchange derived for all exports, states a December 22 dispatch from the U. S. Embassy at Managua.



Norway

WINTER HERRING FISHERY: Using electronic instruments to spot herring schools, scientists aboard the Norwegian research vessel G. O. Sars, were at sea early in January to meet the annual mature winter herring spawning run off the Norwegian coast, according to a January 8 release from the Norwegian Information Service. When the run starts in earnest, the commercial herring fleet will be directed to the points of maximum concentration by short-wave radio. Just when the herring will arrive is always difficult to ascertain, but a noted Norwegian fisheries consultant has made accurate predictions as to time and place for several seasons in a row, and believes the main influx should reach waters southwest of Aalesund on or about January 15.

Hundreds of fishing vessels along the western province of Møre are all geared for the start of the winter herring fishery. In 1953 it is expected that at least 25,000 fishermen will participate, and the fleet will be larger than ever before.

This year the transportation of herring to oil-and-meal reduction plants located north and south of the fishing banks has been cooperatively organized, which should speed deliveries. The daily capacity of the fish-meal plants is about 29,000 metric tons of raw herring--an increase of 4,500 tons above 1951.

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FISH CONSUMPTION, 1952: The per-capita consumption of fishery products in Norway during 1952 was estimated at 48 kilos (106 pounds), states a November 17 U. S. consular dispatch from Oslo. Consumption, which has remained fairly constant each year since 1947, is above the prewar average. Although the annual catch of fishery products has doubled since 1946, there has been no sizable increase in consumption due to the transportation problem: production of high quality fish is greatest on the west coast of Norway while the greater portion of the population is located in eastern and southern Norway.

The large fish consumption offsets the deficit of meat and other animal protein in the Norwegian diet.



Pakistan

FISHERY HARBOR PLANNED FOR KARACHI: A fishery harbor, to include a wholesale market and ice and cold-storage facilities, is planned for Karachi. Construction will commence April 1953, according to a press report in Karachi newspapers. This harbor will take two years to complete and will be the first of its kind in the country.

Blueprints for the fishery harbor were prepared by two United Nations Food and Agriculture Organization experts in early 1951 after they had studied the area around Karachi harbor. Plans for the harbor were submitted after consultations with Pakistan fishery experts about March 1952.

The plan envisages the establishment of a fishing center in West Pakistan. It will include a wholesale fish market where the fishermen operating in Karachi waters can sell their catch. It will also have a cold-storage unit of 15-metric-tons-per-day capacity where fish can be stored at reasonable rates. An ice plant also will be included.

An interesting feature of the harbor will be provisions for the comfort of the fishermen. There will be a good rest house where the fishermen can stay.

The harbor itself will extend over an area of 40 acres. It will have the capacity to handle 350 fishing craft of an average length of 45 feet. The first year handling capacity of the harbor will be 15,000 metric tons, to be later increased to 30,000 metric tons. The harbor will also have a workshop for repair of fishing craft and fishing equipment. The railway line at present is only 500 yards from the proposed site for the fishing harbor, but in the future the harbor may be connected by rail with the rest of West Pakistan.

The fishery harbor will have a direct outlet to the sea apart from the present shipping lane through the port of Karachi. Thus, the fishing craft plying from harbor to open seas would not interfere with the normal traffic of the Karachi seaport.



Panama

NEW BAIT-FISHING REGULATIONS ANNOUNCED: New bait-fishing regulations in Panamanian jurisdictional waters of the Pacific Ocean were announced by the Panamanian Government in Decree No. 30 of December 22, 1952. Increasing Panamanian Government revenues, eradicating the illegal practices that have hitherto existed, and increasing the volume of business which Panamanians secure from tuna boats were the objectives for the changes incorporated in the new regulations, according to a January 2 dispatch from the U. S. Embassy in Panama. Article 15 of the new decree (which appeared in Gaceta Oficial, No. 11,964, December 30, 1952) annuls previous decrees (Nos. 215 and 216 of October 27, 1951; 324 of May 28, 1952; and 330 of June 7, 1952) dealing with bait fishing.

A number of significant changes are incorporated in the new Decree.

Henceforth, and presumably until the National Assembly enacts an organic law on the subject which is here envisaged, the price of a license to a tuna boat will be calculated on the basis of B/. 15 (US\$15) for each ton of the boat's net weight. Previously, in Decrees 330 of June 7, 1952, and 216 of October 27, 1951, the price was based on a flat fee depending upon the weight category of the boat. The following table shows the cost of licenses under the new decree as compared to the preceding one:

PANAMANIAN SCALE OF LICENSE FEES FOR BAIT-FISHING VESSELS		
Weight of Vessel	Fee Under	Fee Under
	Decree No. 330 June 7, 1952	Decree No. 30 Dec. 22, 1952 ^{1/}
Net Tonnage	US\$	US\$
Under 25	100	up to 375
Over 25 and up to 50 ...		390 to 750
Over 50 and up to 100 ..	800	765 to 1,500
Over 100 and up to 150 .		1,515 to 2,250
Over 150 and up to 200 .	1,000	2,265 to 3,000
Over 200	1,200 and up	3,015 and up

^{1/}CALCULATED ON BASIS OF A BOAT'S NET TONNAGE MULTIPLIED BY B/. 15 (US\$15).

Licenses must be secured through "the services of Agencies legally established in the Republic of Panama."

Licenses must be paid for by means of a check drawn in favor of the Panamanian National Treasury. Licenses will be issued by the Ministry of Agriculture, Commerce, and Industries.

Licenses are to be signed by the Minister of Agriculture, Commerce, and Industries and by the Secretary of Commerce or by the latter only when he has written authority from the Minister to that effect.

The new decree changes the period for which the licenses are valid. Under the previous decree (No. 330) they were valid for one year from the date issued. Under Article 4 of the new decree, however, they shall "cover the fishing season of each year on whatever date the vessel applies for the license." A transitory provision in Article 4 provides that vessels which purchased and paid for licenses in accordance with the terms of Article 2 of Decree 330 (which provided that said licenses would be valid for one full year from the date of purchase) will be permitted to fish during the 1953 season until the date on which their license expires.

This is interpreted to mean that all licenses purchased under this decree will be seasonal licenses which will expire at the end of the season of the year in question; and that a license for a given boat purchased during the last month of the season, for example, will cost the same as one for the entire season. This change presumably was inaugurated in order to encourage tuna boats to bait fish in Panamanian waters for the full season and to emphasize that short-term licenses (covering any part of the season) will not be sold.

The new decree (Article 3) also changes the bait-fishing season from February 1-September 30 of each year to February 15-October 15; and it deprives the Minister of Agriculture, Commerce, and Industries of the discretionary authority to permit fishing during the remainder of the year.

Article 5 of the new decree states that the application for bait fishing must be accompanied by "all receipts for deposits issued and the value of all bait permits issued to applicants (boat operators) during the last two years."

The new decree also requires that all boats receiving licenses in the future must purchase their fuel, make their repairs, and purchase their supplies and lubricants in Panama.

Also, the fishermen's cards, carried by the captain and crew members of tuna boats, must bear a national stamp costing US\$1.00. The Ministry of Agriculture, Commerce, and Industries is authorized by the decree to adopt all measures conducive to obtaining an efficient control and strict vigilance of bait-fishing activities envisaged by the decree.

Aside from the changes noted, the new decree is identical or closely similar in most respects to the previous decree (No. 330) regulating bait fishing. The more important similarities follow.

The legal bait-fishing area as described in the earlier Decree No. 330 remains unchanged. This area is defined in Article 1 as the jurisdictional waters of the Republic, within the limits of the continental shelf, Pacific littoral, situated south 8°30' N. and east 79°15' W. This is interpreted as including the area around Chepillo Island, the mouth of the Bayano River, the Pearl Islands, but excluding that area around Chame Point and the islands of Otoque, Bona, Taboga, and Taboguilla.

Article 6 of the new decree, concerning the killing and mutilating of any fish caught not appropriate for tuna bait or needed for the crew's food, and prohibiting the selling of fish within the Republic, remains the same as the similar article in earlier decrees.

The definition of what species shall comprise tuna bait, and end-of-the-season reports on types and quantities of fish caught, are included in Article 7 and are the same as in previous decrees.

The penalty for violations remains unchanged.

NOTE: FEES ARE LISTED IN BALBOAS WHICH ARE AT PAR WITH THE U. S. DOLLAR, I.E., 1 PANAMANIAN BALBOA EQUALS US\$1.

ALSO SEE COMMERCIAL FISHERIES REVIEW, VOL. 14, NO. 8 (AUGUST 1952), P. 43.



Republic of the Philippines

IMPORTS OF CANNED CALIFORNIA ANCHOVIES PERMITTED: Imports into the Philippines of anchovies labeled as sardine or packed sardine style were approved by the Import Control Commission on December 5. This product is now listed, as are canned sardines, as a decontrolled item. Although requiring licenses, decontrolled items may be imported without limitation as to volume and value.

This change was based on a recent ruling by the Philippine Board of Food Inspection. California canners and exporters are now permitted to ship canned an-

chovies packed sardine style to the Philippines labeled exactly that way or labeled "sardines," provided the word "anchovies" is shown on the label clearly, conspicuously, and adjacent to and qualifying the word "sardines." Previously the canned anchovies imported into the Philippines were considered a luxury since they were mostly the European pack (cured fillets in olive oil). Through its Import Control Commission, the Philippine Government had placed a tight control on imports of all canned anchovies. However, the canned anchovies packed sardine style in California are not considered a luxury pack and the recent Philippine ruling permits imports of California canned anchovies packed sardine style.

The California sardine fishery this season (August 1952-January 1953) was a complete failure. Taking advantage of the unprecedented catches of anchovies in the districts of San Francisco and Monterey, California canners packed substantial quantities of anchovies sardine style. The only market of any consequence for this type of product at this time is in the Philippines.



Tunisia

FISHERY PRODUCTS EXPORTS TO THE UNITED STATES, 1951-52: The following table shows Tunisian exports of fishery products to the United States for 1951 and 1952:

Tunisian Exports of Fishery Products to the United States, 1951-52				
Item	1952		1951	
	Weight	Value	Weight	Value
	Lbs.	US\$	Lbs.	US\$
Sponges	6,900	36,216.15	14,500	88,213.40
Snails	124,000	29,807.79	120,500	23,050.00
Dried Octopus	5,000	2,250.00	2,600	1,310.00
Cuttlefish bone	54,500	13,017.00	42,000	7,166.00

NOTE: REPORTED BY A JANUARY 12 U. S. CONSULAR DISPATCH FROM TUNIS.



United Kingdom

ABERDEEN BANS LANDINGS BY ICELANDIC-OWNED FISHING VESSELS: In an agreement drawn up recently, the Aberdeen, Scotland, fishing industry placed a ban on the purchase of fish from Icelandic-owned vessels at that port and at the same time partially lifted the restrictions on German vessels, states the November 29 issue of The Fishing News, a British trade periodical. This action is the result of the Icelandic-British dispute that developed through the extension of Iceland's territorial waters for fishing. The agreement was the result of a joint meeting by the directors of the Aberdeen vessel owners, dealers, and fishermen.

The meeting adopted the following resolution: "(1) that the Aberdeen Fishers' and Merchants' Association will immediately instruct its members not to buy fish from any Icelandic-owned vessel that may land; (2) that an interim period of two weeks be allowed to permit the introduction of machinery to ensure supplies to the port and the consumer; (3) that in the two-week period following, the restrictions on ice from German vessels shall be lifted to permit one German vessel per week to discharge, sell its fish, and be iced at the port; (4) if on December 29 a long-term policy has not been ratified, measures will be taken to adjust the supply position as necessary."

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HEAVY STOCKS OF CANNED SILD SARDINES REPORTED: Difficulties in marketing the catches of sprat herring have marred the beginning of the season in the Firth of Forth, states the December 6 issue of The Fishing News, a British fishery periodical. Scottish canners have intimated that they cannot buy the raw fish because of very heavy stocks (canned or frozen raw fish) of sild sardines on hand.

Marketing difficulties for sprats are attributed to the collapse of the Australian market, to which Scottish sild canners were sending tremendous quantities. A further blow has been the loss of the British home market to the Dutch who auctioned off imported Norwegian canned sild sardines to the British Ministry of Food. British canners claim that the prices at which the imported Norwegian canned sild are being offered are well below cost and purchase prices.

According to one canning firm, some 8,000,000 cans of canned sild sardines remain unsold from last season, plus some 500 tons of frozen sprats awaiting canning. This position is duplicated by other firms in the trade, according to reports. Estimates place imported Norwegian canned sild sardine stocks at 25,000,000 cans, now being cleared at around 7d. (8 U.S. cents) per can by the British Ministry of Food. British canned sild sardines retail at 1s. (14 U.S. cents) per can so that in effect the Ministry is subsidizing imports, according to the canners.

Meantime sprat herring fishermen are getting 20s. (US\$2.80) per cran^{1/} for their fish for animal-food production. It was reported that fisherman stopped fishing early in December to wait for the New Year season when various types of herring are in demand.

^{1/}ONE CRAN IS A MEASURE EQUAL TO 45 U. S. GALLONS.

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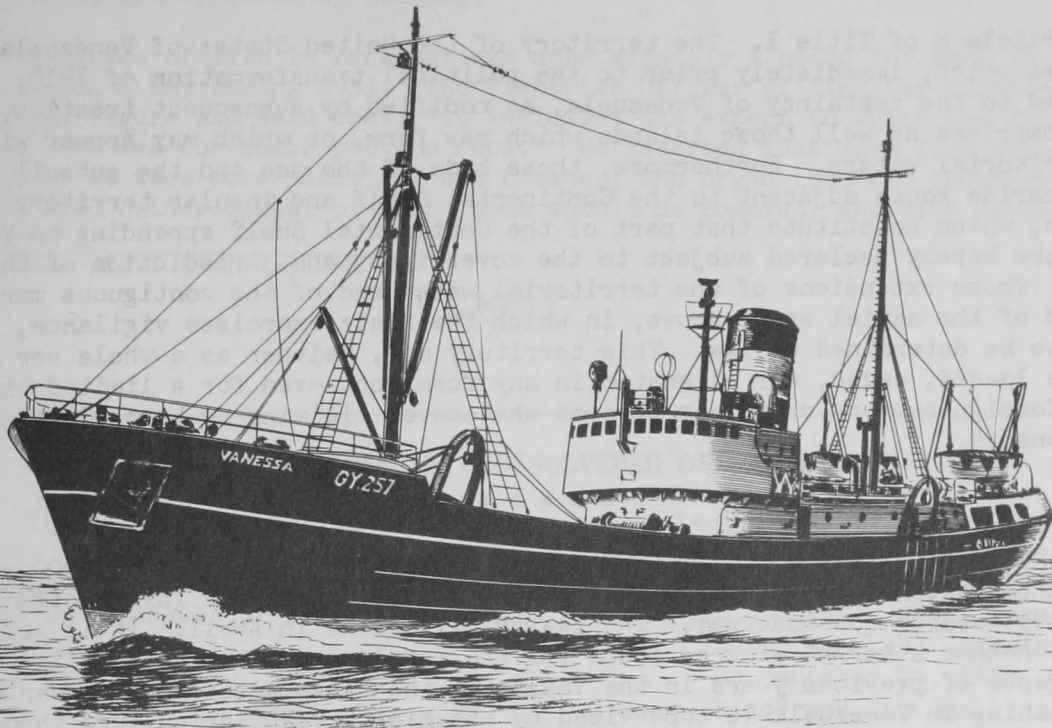
MODERN TRAWLER LAUNCHED AT GRIMSBY: The trawler Vanessa, called the most modern of fishing vessels, sailed from Grimsby in December with all the aids to navigation, fishing, and for the comfort of the crew, according to the December 1952 Fishing Industry, a London trade magazine. Built at Beverley, the Vanessa has the best navigational aids obtainable, with radio of world-wide range, directional radio, radar, echo-sounders, a fish finder, etc. Also everything possible has been included to make the Vanessa a pleasant vessel for the crew even to providing music on deck while the men work.

Dimensions of the new trawler are: length 181.40 feet, breadth 31.10 feet, depth 15.20 feet; I.H.P. 1,100; B.H.P. 930. On trials it achieved a speed of 13.4 knots light and just under 13 knots loaded. The main motor is standard triple expansion. It is fitted with feed and bilge pumps operated from levers on the engine. The circulating pump is of the centrifugal type, direct driven by motor. Oil-fired, the marine-type Scotch boiler has a working pressure of 225 lb. p.s.i.

The trawl winch is of the Triton type, and has a capacity on each barrel of 1,000 fathoms of 3-in. warp.

Communication between the various parts of the ship is under cover wherever possible, and there is covered access between the bridge and the extreme aft of the vessel. Verbal communication is by means of loudspeakers fitted throughout the trawler, so that the Captain on the bridge can speak to anyone anywhere on the vessel. Similarly, hand microphones installed in vital parts of the vessel enable crew members to reply without a journey up to the bridge. In case the telemotor should break down, auxiliary hand-steering gear is installed right aft below decks, and the unsighted helmsman receives orders relayed electrically from the bridge.

The Vanessa has accommodation for a crew of 28, situated aft. Forward are three big holds, one fitted out for stores and wire-splicing apparatus, while



THE NEW MODERN BRITISH TRAWLER VANESSA EQUIPPED WITH THE LATEST NAVIGATION AND FISHING AIDS, AND MUSIC FOR THE FISHERMEN AT WORK.

trawls are prepared for use and nets are repaired completely under cover in the other two holds.

The cofferdam has been adapted into two tanks, one to take immature fish for reduction and one to hold offal. Livers from the gutted fish are pumped direct from the deck to the liver boiler below the aft end, no intermediate handling being required. The kits of livers are fed into the hopper and container placed just forward of the winch. When the hopper is filled, steam is applied and the livers are blown through pipes into a collecting tank by steam pressure, and are then fed into the "Egg-Timer"-type liver boiler. Patent fishroom hatch-covers and a fish-washing machine on the deck are notable features.



Venezuela

CONTINENTAL SHELF MAY BE CLAIMED AS WITHIN TERRITORIAL LIMITS: The new Venezuelan Constitution being drafted will include some reference to the Continental Shelf in its definition of territorial limits, according to Venezuelan press reports. A Venezuelan writer and economist has suggested that Venezuela claim sovereignty over the territorial waters and the submarine subsoil as far north as Bird Island, a Venezuelan possession in the Caribbean Sea some 300 miles from the Venezuelan coast line.

The El Heraldo on January 21 quoted an Article which it understood was to be included in the new Constitution as a definition of Venezuelan territorial limits, a January 26 dispatch from the U. S. Embassy at Caracas states. The Article reads as follows:

"Article 8 of Title 1. The territory of the United States of Venezuela is that area which, immediately prior to the political transformation of 1810, corresponded to the captaincy of Venezuela, as modified by subsequent treaties, and which comprises as well those islands which may form, or which may appear within, the territorial waters. Furthermore, those beds of the sea and the subsoil of the submarine zones adjacent to the Continental Shelf and insular territory of the Republic, which constitute that part of the Continental Shelf appending to Venezuela, are hereby declared subject to the sovereignty and jurisdiction of the Republic. Those extensions of the territorial water and of the contiguous maritime zone and of the aerial space above, in which the State exercises vigilance, are hereby to be determined by law. This territory may, neither as a whole nor in part, be leased, ceded, nor alienated in any form, not even for a limited time, to any foreign country or to any persons whatsoever claiming to have rights to those zones."

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PEARL FISHING SEASON BEGINS WITH MARKET UNCERTAIN: Approximately 200 well-equipped boats commenced oyster-pearl fishing January 1 off the Island of Margarita, as the 1953 season got underway. The season will close in April. It is still uncertain whether a market will be found for the pearls or whether they will join the harvests of previous years in the vaults of the Banco Agricola y Pecuario. Pearl fishing in Venezuela is supervised by the Ministry of Agriculture through its Nueva Esparta office, according to a January 28 U. S. consular dispatch from Caracas.



Zanzibar Island

REVIEW OF THE FISHERIES, 1951: The estimated total catch of fish on Zanzibar Island during 1951 was 4,208,000 pounds, valued at £126,000 (US\$354,000), states a December 3 U. S. consular dispatch from Mombasa, Kenya. No information is available on the catch by species. These figures include unrecorded landings at the smaller beaches. The quantities of fish landed at ten main fishing centers in Zanzibar Island was determined by fishery guards who met all fishing boats as they arrived and recorded data regarding the catch. A census was also taken of all fishermen and their craft.

Landings during any single month never fall below 14 percent of the monthly average. A regular supply of fish is thus available for the Zanzibar market. The catch is greatest in March. During the month, the prevailing wind changes from the northeast to the southwest; and the sea is fairly calm since light breezes prevail during the transition. In April, May, and November wet and stormy weather reduces the size of the catch.

The census of fishermen revealed that approximately 1 man in 8 is a fisherman by occupation. A total of 4,975 men and 1,461 fishing craft are employed in the industry. The average catch per man per year is approximately 850 pounds and the average fisherman earns £25 (US\$70) a year. This low income is insufficient to keep a family and necessitates work in other fields.

A total of 1,461 boats are used for fishing (969 outrigger dugout canoes, 324 dugout canoes without outriggers, 129 small dhows, and 39 dinghies). The average crew is 3 men per craft, although the dhows require more men and many dugout canoes are operated by one man.

Consumption of fish in Zanzibar was approximately 1 pound for each 13 head of population a day during 1951. The Fisheries Officer of Zanzibar considers this a high figure and said that, "it indicates the extent to which the Zanzibaris looked to the sea for their protein food." He asserted that more fish would be consumed if it were more plentiful and cheaper, and urged that the industry be provided with better boats, of which some should be powered, and with better fishing gear.

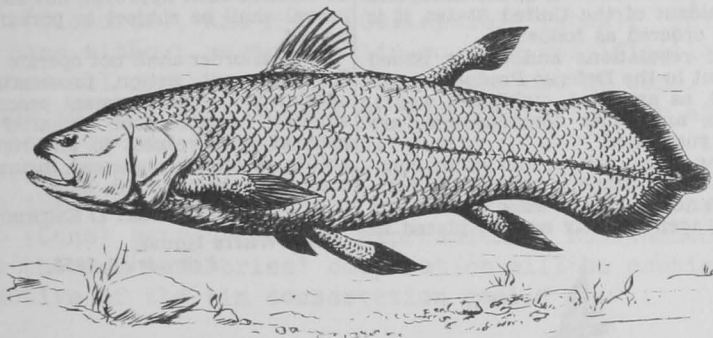
NOTE: PEMBA ISLAND IS NOT INCLUDED.



"EXTINCT" FISH SPECIES REDISCOVERED OFF AFRICAN COAST

The Coelacanth, a fish believed to be extinct for over 60 million years, reappeared very much alive for the second time in modern history off the African coast, according to recent press reports. It is claimed to be the closest surviving relative to the ancient creatures that linked

water and land animals. On December 20, 1952, a fisherman on a small island in the Comores Archipelago (between Madagascar and Africa), using line and ordinary bait in moderately deep water over rocky bottom about 200 yards from shore, hooked a large fish of a type he had never seen. Steel-blue scales, surfaced with an enamel-like substance, covered the 5-foot 100-pound



A COELACANTH, A FISH BELIEVED TO BE EXTINCT FOR OVER 60 MILLION YEARS, WAS CAUGHT OFF SOUTHEAST AFRICA IN DECEMBER 1952.

fish. The fisherman took the fish to market and would have disposed of it in the usual way had not another fisherman remembered an old pamphlet distributed years previous by a South African ichthyologist, Dr. J. L. B. Smith, offering a £100 (US\$280) reward for such a specimen. Dr. Smith had distributed his pamphlet when a previous Coelacanth specimen had been captured in 1938 off East London, South Africa, but unfortunately all the internal organs had rotted.

This recent discovery was hailed throughout the world as one of the greatest palaeontological events of the century. It was believed that these fish declined in number and by 100 million years ago not many remained. Fossil records indicated 70-60 million years ago the Coelacanthidae had all perished. Therefore, it was a great shock for the biological world when the 1939 and 1952 discoveries produced a live true Coelacanth almost bone for bone and fibre for fibre identical with those 300-70 million years ago.