



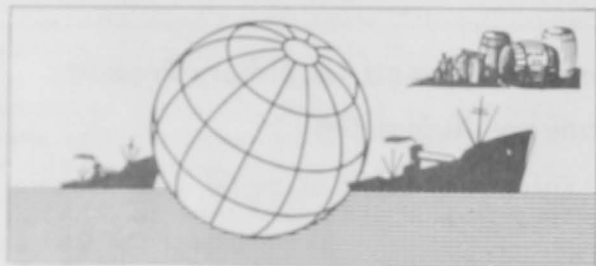
International

FISH BODY OILS

MARKET IN WESTERN EUROPE:

This assessment of the fish body oil market in Western Europe was made early in September 1961 by the Regional Fisheries Attache stationed at the United States Embassy in Copenhagen. The assessment is based on conferences with the most important fish oil trade interests and government representatives in Hamburg, Bremen, The Hague, and Rotterdam.

The semi-refined Peruvian fish body oil price on September 1, 1961, was US\$125 per metric ton (about 5.67 U.S. cents a pound), in bulk c.i.f. Rotterdam, but probably the same price prevailed for delivery in other northern European ports, especially Scandinavian. The fish oil market in Western Europe is weak with buyers believing bids a few dollars a ton lower would be accepted. Panamanian oil is in the market at about the same price in small lots. Buyers also believe there are unsold stocks in Peru, Iceland, and other countries, and that forthcoming production in Peru this fall with lack of storage will not permit Peruvian producers to hold the current price level and it may drop to \$110-\$115 a ton (5.0-5.22 cents a pound). They state Peruvian sellers repeatedly failed in efforts to stabilize the market at successively lower levels in the last six months.



Since Peruvian fish body oil is the dominant factor in the European market, menhaden oil must meet competition from that product. A very large buyer says that crude menhaden oil with 3 percent free fatty acid, 1 percent moisture, and impurities, unbleached, untreated, and free from mineral oils, with analysis in the United States, is worth \$4 to \$5 less per metric ton than semi-refined Peruvian oil with 1/2 percent free fatty acid, 1/2 percent moisture, and impurities, maximum 1 1/2 percent unsaponifiables, color maximum Gardner 9, iodine number maximum 200, with analysis European port. The high iodine number of Peruvian oil is compensated for by low stearine and free fatty acid.

The West European fish body oil trade believes there are no significant changes in the consumption of fish body oils. Oils up to 3 percent free fatty acid are used for margarine, over that for technical industrial uses in leather industry, paints, floor coverings, foundries, and fish canning. In Germany 80 percent of the use in the leather industry has reportedly been taken over by chemicals which are more uniform in action.

Consumption of butter reportedly has increased in Germany and the Netherlands due to prosperous economies.

Margarine consumption is down possibly 10 to 20 percent. Some sales of margarine declined for a short period due to publicity of use of a stabilizer which may have caused illness to consumers, but which was not scientifically proven to be at fault. It is believed that the future demand for margarine made from fish body oils will be relatively stable because the vegetable margarine price is appreciably higher.

Sales for menhaden oil are poor at the current market and are not expected to improve in the foreseeable future except at competitive prices with Peruvian semi-refined oil, possibly at \$4 to \$5 less per ton. No one sees new markets for fish body oils, even at lower prices because there are no lower-priced oil markets to enter, and lower prices are not expected to stimulate margarine use. Menhaden oil would receive better acceptance if more attention was paid to quality by not mixing good and poor lots, and if iodine number, free fatty acid, and stearine were lower.

INTER-AMERICAN TROPICAL TUNA COMMISSION

EASTERN PACIFIC YELLOWFIN TUNA FISHERY REGULATION RECOMMENDED:

The Inter-American Tropical Tuna Commission, consisting of representatives of the Governments of Costa Rica, Ecuador, Panama, and the United States, recommended on September 14, 1961, joint action by their Governments to regulate the fishery for yellowfin tuna in the Eastern Pacific Ocean in order to conserve the populations of this species of tuna and to maintain them so as to provide maximum continuing harvests. This was the result of a special meeting of the Commission, held in Long Beach, Calif., which adopted a resolution to that effect.

The Commission's scientific staff, with headquarters at the Scripps Institution of Oceanography of the University of California, has been carrying out during the past 11 years extensive scientific research on populations of tropical tunas (yellowfin and skipjack) in the Eastern Pacific Ocean and the effects of the fishery upon them. These researches have made it possible for the Commission to detect the advent of overfishing of the yellowfin populations in its early stage, and to recommend effective conservation measures immediately upon finding that they are required.

Until 1959, both the skipjack tuna and the yellowfin tuna had remained underutilized. With the conversion of many vessels of the fishing fleet from bait-fishing to purse-sein-

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ing, which is especially effective for catching yellowfin tuna, and with the addition of new vessels to the fishing fleet, during the past two years, the intensity of fishing reached, in 1960, the level corresponding to the maximum sustainable catch of yellowfin tuna in the Eastern Pacific Ocean. It is expected that during 1961, the fishing intensity will be substantially above the optimum amount, and that, in consequence, conservation regulations should be applied to this high-seas fishery for yellowfin tuna. The stock of skipjack tuna, however, which are fished by the same fleet of vessels, in the same region of the ocean, can support harvests much greater than are presently being obtained. The Commission, therefore, faced the problem of limiting fishing for yellowfin tuna while encouraging expansion of the fishery for skipjack.

The Commission met on September 14, with its Director of Investigations and several members of his staff, and with representatives of all elements of the tuna fishing industry, to consider the need for conservation regulation of the fishery for yellowfin tuna, to select the most appropriate type of regulation, and to make specific recommendations to the Member Governments for regulations during the forthcoming year. Official observers were also present from Colombia, Mexico, and Peru.

A review of the extensive data collected by the staff based on detailed statistics of fishing effort and catch, and on biological studies of the tunas indicated clearly the need for regulation of the fishery for yellowfin. Careful consideration of various possible types of fishing regulations led to the conclusion that an annual catch limit, or "quota" would be the most effective and practical measure. Based on the staff's estimate of the harvest that will be taken during 1961, the quota for 1962 was recommended to be 83,000 tons, of which amount 74,600 tons may be taken during an open season commencing January 1, 1962, and 8,400 tons will be reserved for unavoidable incidental catch of yellowfin by vessels fishing for skipjack after the closure of the season for yellowfin. Any vessel fishing for skipjack during the closed season for yellowfin will be allowed a maximum of 15 percent of yellowfin in its landings for each trip.

Since the recommended quota is based on a forecast of the catch of yellowfin during the

remainder of 1961, and the actual catch may be different from the estimate, the Commission will review the catch-statistical data soon after the end of the year and, if indicated, transmit revised recommendations to the Member Governments. This will be done at the regular annual meeting of the Commission which will be held in mid-May 1962 in Quito, Ecuador, unless it is necessary to hold another Special Meeting prior to that date.

In the future, it is expected that recommendations for catch-quotas on yellowfin tuna will be made annually at the regular annual meetings of the Commission, which are held each spring. The sites of the meetings rotate among the member countries.

Although regulation by catch-quota was found to be the most practical method of regulation of the yellowfin fishery at this time, the scientific data indicate that establishment of a minimum size limit, greater than the present size at which yellowfin commence to be caught, could substantially increase the harvest which could be obtained. This is because, at small sizes, the tuna of this species are gaining more weight by growth than is being lost by mortality. Hence, by leaving them in the sea to grow to a larger size before capture, the tonnage caught could be increased. Unfortunately, however, fishermen cannot now usually determine the size of fish in a school until it is in the net and most of the fish are dead or dying. It is hoped that further research by industry and governmental agencies will lead to development of methods whereby the master of a fishing vessel will be able to determine accurately the size fish in a school before setting his net around it. Such a development could lead to an increase in the harvest of yellowfin tuna of a value of several millions of dollars each year.

The resolution adopted by the Commission follows:

"Observing, that the studies of its scientific staff have indicated that during the year 1960 the intensity of fishing for yellowfin tuna in the Eastern Pacific Ocean had reached the level corresponding to maximum average sustainable catch;

Observing, that continuing studies of catch statistics and other data indicate that, during 1961, there has been a further increase in the amount of fishing for yellowfin tuna, that the total catch during this year will exceed the sustainable yield, and that, consequently, the

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populations of this species will most probably be reduced to a level which cannot provide sustained maximum yield.

Concluding, therefore, that there is a need for joint action by the High Contracting Parties to restore the yellowfin populations to those levels of abundance which will make possible the maximum sustainable yield, and to maintain them in that condition.

Noting, however, that the stocks of skipjack tuna, which are fished in the same fishing region, at the same time, can support increased harvests, which should be encouraged.

Noting that in fishing for skipjack some incidental catch of yellowfin is unavoidable.

Having considered various possible types of regulation of the yellowfin tuna fishery with respect to their biological and economic effects, feasibility and enforcement, and

Having considered that limitation of total catch, by annual quota, is the most effective and practicable type of regulation.

Noting that, although there are, in the Eastern Tropical Pacific, at least two semi-independent component yellowfin tuna populations, the allocation of fishing effort to them due to economic forces is such that, with a single annual catch quota for the entire region, there is a high probability that there will result properly balanced harvests from the population components, and, consequently,

Having concluded that, initially at least, regulation of the yellowfin tuna fishery should be effected by a single annual total catch quota for the entire region.

Having considered the estimates of the scientific staff that

(1) There will be removed by the end of 1961, from the yellowfin tuna stocks, some 23,000 tons, above the maximum sustainable yield, which require to be restored.

(2) At the level of abundance which will be reached by the end of 1961 the yellowfin stocks will most probably be capable of sustaining a yield of only 87,000 tons (if recruitment is density-dependent) or of 95,000 tons

(if recruitment is density-independent), it being not possible at this time to state which condition applies.

(3) A catch quota of less than the sustainable yield at the level of abundance expected to be reached by the end of 1961 is required to restore the stocks to the condition corresponding to maximum average sustainable yield

Recommends to the High Contracting Parties, that they take joint action, as follows:

(1) Establishment of a quota of total catch of yellowfin tuna by fishermen of all nations of 83,000 tons during the calendar year 1962.

(2) Reservation of 8,400 tons of this yellowfin tuna quota for allowance for incidental catches when fishing for skipjack after closure of the fishery for yellowfin tuna.

(3) Opening of the fishery for yellowfin tuna on January 1, 1962; during the open season vessels to be allowed to clear port for fishing for this species and for skipjack.

(4) Closure of the fishery for yellowfin tuna during 1962 at such date as the quantity landed plus the expected landings of vessels which are at sea with clearance for yellowfin tuna fishing reaches 74,600 tons.

(5) After the closure of the yellowfin tuna fishery, issuing of clearances to vessels for skipjack fishing only. Any vessel operating under such clearance should be allowed to land not more than 15 percent by weight of yellowfin among its catch on any trip.

(6) Such action as may be necessary to induce Governments whose vessels operate in this fishery, but which are not parties to the Convention for the Establishment of an Inter-American Tropical Tuna Commission, to cooperate in effecting these conservation measures.

Resolves that the statistics of catch and effort respecting yellowfin tuna will be reviewed as soon after the end of calendar year 1961 as practicable and, if there is any substantial departure from the forecast values, the foregoing recommendations will, if indicated, be revised and the High Contracting Parties will be advised accordingly by this Commission.

International (Contd.):

INTERNATIONAL PACIFIC HALIBUT COMMISSION

NORTH PACIFIC HALIBUT FISHING
IN AREAS 2 AND 1B ENDED:

The International Pacific Halibut Commission on August 29 announced the closure of Areas 2 and 1B to halibut fishing effective at 6 a.m. (P.S.T.) September 7, 1961. The Commission estimated that the 28-million-pound limit set for Area 2 would be caught by the closing date. Area 1B, which has no catch limit, will also be closed on the same date as Area 2. Fishing in Area 3A ended on August 23. Fishing in Areas 1B, 2, and 3A is ended until the areas are reopened in 1962.

The official opening date for all halibut fishing in the North Pacific regulatory area this year was May 10 at 6:00 a.m. (P.S.T.), except that fishing in Area 3B South started on April 25 and Area 3B North started on April 10.

Areas 2 and 1B this year were open to halibut fishing for 120 days as compared with 91 days in 1960, 68 days in 1959, 59 days in 1958, and 47 days in 1957. These same areas were fished for 38 days in 1956 (fishing started May 20), 24 days in 1955, 21 days in 1954, and 24 days in 1953. Area 1B includes the waters between Heceta Head and Willapa Bay, Wash.; Area 2, the waters between Willapa Bay and Cape Spencer; Area 3A, the waters between Cape Spencer and Shumagin Islands.

In 1960 there was a second fishing season for Areas 2 and 1B. But the regulations for this year provided for only one season with a quota of 28 million pounds for Area 2 instead of 26.5 million, the quota for 1960. Fishing in Areas 1A, 3B South, and 3B North will continue until 6 a.m. (P.S.T.) October 1, 1961. Area 3B South includes the waters West of Area 3A, not including the Bering Sea. Area 3B North includes the waters in the Bering Sea. Area 1A includes waters South of Heceta Head, Oreg.

Note: See Commercial Fisheries Review, October 1961 p. 41.

MARINE OILS

WORLD PRODUCTION
AND FOREIGN TRADE IN
MARINE OILS, 1957-61:

World production of marine oils (including whale and sperm whale oils, and fish and fish-liver oils) in 1961 is ex-

pected to show an increase over 1960. Increased whale oil production will be due to more coming from the Antarctic. Increased sperm whale oil production will be due to an increase from areas outside the Antarctic.

Table 1 - Estimated World Production of Marine Oils, 1957-61

Type	1961 ^{1/}	1960	1959 ^{2/}	1958 ^{2/}	1957
..... (1,000 Short Tons)					
Whale	450	425	415	435	440
Sperm whale	130	120	130	135	110
Fish (including liver)	600	565	575	515	485
Total	1,180	1,110	1,120	1,085	1,035
^{1/} Forecast.					
^{2/} Revised.					

World exports of marine oils are expected to increase to an all-time high in 1961. Both exports of whale and sperm whale oil will increase, while shipments of fish oils should reach the record quantity of 1960.

Table 2 - Estimated World Exports of Marine Oils, 1957-61

Marine Oils	1961 ^{1/}	1960 ^{2/}	1959 ^{2/}	1958	1957
..... (1,000 Short Tons)					
Whale	450	425	415	435	440
Sperm whale	130	120	130	135	110
Fish (including liver)	300	300	265	200	190
Total	880	845	810	770	740
^{1/} Forecast.					
^{2/} Revised.					

As of mid-1961, Iceland's fish oil exports were expected to drop sharply from the record high shipments of 1960, made possible by large beginning stocks. However, this drop will be offset somewhat by increased exports from Peru and the Republic of South Africa. Production of fish oil in those two countries is expanding rapidly and all, except a limited quantity retained for domestic consumption, enters world trade. World trade in fish oils in recent years has been stimulated by a declining production of marine oils in Western Europe, the world's leading consumer of those oils. (Foreign Crops and Markets, U. S. Department of Agriculture, August 31, 1961.)

TUNA

CONFERENCE HELD ON BIOLOGY
OF PACIFIC OCEAN TUNAS:

An informal Pacific Tuna Biology Conference, arranged by the U. S. Bureau of Commercial Fisheries Honolulu Biological Laboratory, was held at the University of Hawaii, August 14-19, 1961. It was attended by 79 individuals, including 40 from overseas. In addition to the continental United States, the overseas participants were from Australia, Canada, Ecuador, Hong Kong, Italy (FAO), Japan, New Caledonia, New Guinea, New Zealand, and the Philippines.

Virtually all of the 50 contributed papers were reproduced and distributed in advance of the Conference. No papers were presented at the Conference. They were grouped by

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subject matter in the following categories: (1) Taxonomy and Nomenclature; (2) Distribution; (3) Migration; (4) Behavior; (5) Subpopulations; (6) Tuna Oceanography; and (7) Background Papers. Half-day discussions were held on nearly each category. Each discussion group was provided with a discussion leader and rapporteur. Summary reports of the discussions were available on the day following.

Recommendations of the Conference arose during the course of the discussions and from two working groups (one on Taxonomy and Nomenclature, the other on Identification of Larval and Juvenile Tunas). Of the 15 recommendations of the Conference, 4 were concerned with the subpopulation or racial problem. The Bureau's Honolulu Laboratory was requested to establish a World Center for the exchange of tuna red blood cells and reagents used in identifying tuna blood groups (which are being used to identify subpopulations). Examples of problems to be attacked by tagging experiments or blood group studies included (1) do small southern bluefin south of Australia subsequently enter the fisheries to the west and northwest of Australia? (2) what are the movements of small North Pacific albacore up to the time they enter the fishery?; and (3) do the small-medium albacore found off the west coast of South America eventually enter the fishery of the tropical South Pacific? The importance of improving methods of transporting and storing blood samples was recognized. Additional studies of how much mixing must take place between subpopulations before they are no longer "independent" were urged.

Other recommendations dealt with taxonomy and nomenclature, assessment of year-class size of North Pacific albacore, international cooperation and exchange of scientists between laboratories, and the need to assess the magnitude of the world tuna resource and the potential sustained yield of tuna.

Recommendations, together with abstracts of submitted papers and summary reports of the discussions, will be published.

**Australia****GOVERNMENT-SPONSORED TRAWLING COMPANY TO BE SOLD:**

The Australian Government has decided to invite offers from commercial interests for the trawl fishing enterprise based on Port Adelaide and operating in the Great Australian Bight. The enterprise has been operated by a trawling company backed by the Government.

Announcing this in Canberra on June 14, 1961, the Minister for Primary Industry said the company had naturally encountered problems inevitable in a pioneering project of this sort during the first year or so of operations. However, over the period of 15 months that the company had been trawling, it had done valuable work in testing the commercial potentialities of the Bight fishery. It had obtained information and gained experience that would be of much value to any private concern interested in carrying on the enterprise.

The company's trawler Southern Endeavour is a modern Diesel vessel, 160 feet in length, and well suited to the Bight conditions. The company had undertaken successful experiments in processing the Bight fish and marketing it in the form of frozen fillets. Acceptance by the trade and the public of the processed fish has been very encouraging.

The Minister for primary Industry said the Government's action in providing funds to test the Bight's commercial potentialities had been in line with its policy of aiding the development of Australian fisheries, and the development fund established from the proceeds of the sale of the Whaling Commission in 1956 had been set up for that special purpose. The decision now to invite private enterprise to take over the project was also in line with Government policy.

Negotiations for the sale of the undertaking as a going concern would be in the hands of the Board of Directors of the trawling company. Any offers for a part interest in the undertaking or for the trawler and other assets of the company would likewise be considered. The company would seek offers through the press and appropriate fisheries publications. The decision on the acceptance of any offer would finally rest with the Government. (Australian Fisheries News-Letter, July 1961.)

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Australia (Contd.):

SURVEY OF TUNA RESOURCES OFF SOUTH-WEST COAST PLANNED:

In June 1961, the Australian Minister of Primary Industry announced that a survey to determine the commercial tuna fishing potential off the southwest coast of Australia would be started.

The survey, which would cover a period of 12 months, would be financed from the Fisheries Development Trust Account.

A proven tuna fishing vessel with an experienced crew would undertake the survey and tenders would soon be called for the charter of a suitable vessel.

The Minister said the presence of tuna in the waters off the south-west coast of Australia had been clearly established, but the commercial prospects were unknown. The Commonwealth Government and the Western Australian Government are anxious to extend the tuna industry to the Western Australian area.

In 1960/61 Australian production of tuna was estimated at about 10 million pounds of which about half was produced on the south coast of New South Wales and half in South Australia. The industry has expanded tenfold since 1954/55, when 1 million pounds was produced.

There was believed to be an even greater potential market in Australia, because the present Australian consumption of one-fifth pound of processed tuna per capita per year was well below consumption in the United Kingdom and the United States.

South Australia ended the 1961 tuna season with a catch of about 2,500 tons (value £140,000 or about US\$313,000), according to a statement by an industry member.

This is within about 100 tons of the New South Wales catch of 2,582 tons and means that the Australian total for 1960/61 will reach the 5,000-ton total estimated by Australian fisheries officials.

About 400 tons of frozen tuna had left Port Lincoln for United States ports and another 200 tons were exported in July this year. (Fisheries Newsletter, July 1961.)

**Brazil**COUNCIL CREATED FOR FISHERIES DEVELOPMENT:

A Fisheries Development Council (Conselho de Desenvolvimento da Pesca--CODEPE) in the Brazilian Government has been created by Decree No. 50872 of June 28, 1961. The new agency, which was being organized late in August 1961, will be directly subordinate to the President of the Republic and its Executive Director will therefore have the equivalent of ministerial rank. Federal responsibility for fisheries has heretofore been exercised by the Hunting and Fisheries Division of the Department of Animal Production of the Ministry of Agriculture.

The Fisheries Development Council will be responsible for policy and planning for the fishing industry on a national scale, something which has hitherto not effectively existed. Its policy directives will be carried out by the present Hunting and Fisheries Division of the Ministry of Agriculture as well as by other Federal agencies concerned with the fishing industry and it is authorized to enter into agreements with State and Municipal Governments for this purpose. Its tasks will be to carry out research with the aim of developing the fishing industry; to recommend construction of ports, shipyards, cold-storage plants, processing plants, and other installations; to recommend the granting of subsidies, tax exemptions, and technical and financial assistance for the establishment or development of fishing and fishing vessel construction industries; and to study the re-equipping of the national fishing fleet. The Council will also examine and recommend changes in present fishing legislation, including the organization of the Federal agencies now concerned with fisheries, and take the necessary steps for changing the present Fisheries Credit Fund into a Fisheries Development Bank, though what revenue it will have is not yet known. (United States Embassy in Rio de Janeiro, August 28, 1961.)

**Canada**NEW BRUNSWICK FISH MEAL PRICES, AUGUST 1961:

Fish-meal prices (60-percent protein) quoted by New Brunswick producers late in August 1961 averaged about C\$120 a short ton (\$2.00 a protein unit) for both exports and domestic sales. The price was un-

Canada (Contd.):

changed from the late July 1961 price. (U. S. Consulate, Saint John, N.B., August 29, 1961.)

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REGULATIONS AMENDED TO INCLUDE SHRIMP COCKTAIL:

Canadian requirements for shrimp cocktail were issued on August 16, 1961, as an amendment to the Regulations under the Meat and Canned Foods Act of Canada. The requirements are:



1. "Shrimp cocktail" means shrimp in combination with sauce, spices, seasonings, and flavorings.

2. In the preparation of shrimp cocktail, only sound, cooked, and peeled whole shrimp may be used and the contents of the can shall include not less than 36.5 percent by weight of shrimp.

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RUBBER BANDS FOUND BEST FOR SECURING LOBSTER CLAWS:

A series of experiments in the inactivation of lobster claws has been carried out by scientists of the Fisheries Research Board of Canada. The method offering the best advantages is that of securing the claws with rubber bands or twine. The other methods tried by the team consisted of either inserting a small wooden or plastic plug in the thumb joint of the claw; or cutting the lobster's extensor tendons so that it was unable to open its claw.

After months of experiments with all three, and also with untreated lobsters, it was found that the rubber band method had distinct advantages over both "plugging" and "cutting." While the death rate among lobsters that had been banded was slightly higher than among those that had been "plugged," it was found that the insertion of the plugs often caused serious damage to the claws. This in turn tended to affect the appearance of the shell and the meat, destroyed some of the meat, and led to the development of off-flavors.

The tendon-cut lobsters were not apparently affected by the operation, but it was

found that at times, particularly during handling, the claws opened when the lobsters came into contact with others, and some of the injuries inflicted at such times were thought to have undoubtedly contributed to the increased death rate in lobsters treated in this manner.

The main complaints leveled against the use of bands by Canadian fishermen is that the bands tend to slip off, and that this particular method is slower than plugging or cutting. (World Fishing, September 1961.)



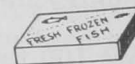
Czechoslovakia

MAY PURCHASE MORE FROZEN TUNA FROM JAPAN:

Czechoslovakia, which signed an agreement with Japan in April 1961 to purchase 1,050 metric tons of frozen tuna, has indicated that she would like to import an additional 900 metric tons, and Japan is shortly expected to approve this second contract. The contract price will be \$290 a metric ton c.i.f. for yellowfin tuna (including albacore and bluefin) and \$275 a ton (c.i.f.) for big-eyed tuna.

Sales to Czechoslovakia, Libya, and Tunisia, etc., not including Italy and Yugoslavia, are expected to total 550 metric tons in October, 480 tons in November, and 1,000 tons in December. (Suisan Tsushin, September 11, 1961.)

Translator's Note: According to earlier press reports, Japan was to deliver 1,050 metric tons of frozen tuna to Czechoslovakia between June and September 1961. Czechoslovakia had then indicated that she would likely purchase more tuna if the shipments proved satisfactory.



Denmark

EXPERIMENTAL TRAWLING FOR COD OFF WEST GREENLAND:

The experimental fishery for cod off West Greenland this summer, conducted by two Danish steel cutters (equipped with bottom and floating trawls) from Skagen, has been characterized as a "fiasco" in newspaper accounts. In four months the cutters were able

Denmark (Contd.):

to catch only 100 metric tons of fish. The unsuccessful effort cost the Greenland National Council 300,000 kroner (US\$43,500). The contract was cancelled August 22, 1961.

The 100-foot vessels were chartered for 32,150 kroner (\$4,700) each per month and fished from Godthaab to Holsteinborg. One reason for the failure was the lack of knowledge of bottom conditions and ocean currents.

The owner of the cutters is less pessimistic about trawling than the Council. His company is investing 6,500,000 kroner (\$943,000) in a fillet plant in Godthaab. When the plant begins operations in 1963, the steel cutters will fish again for polar cod, as he believes unlimited quantities can be taken in the winter. (August 25, 1961, report from the Fisheries Attache, United States Embassy, Copenhagen.)

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FISHERMEN LEAVE INDUSTRY:

Reports from the various Danish fishing ports continue to indicate that fishermen are leaving the fishing industry. At Esbjerg, the largest port, it is believed 400 fishermen have taken other jobs this summer. There is little to indicate that they will return to the fluctuating prices and incomes of the fishing industry.

The head of the Esbjerg Fishery Association has suggested that the Danish cutters recruit Greenland and Faroese fishermen. The Ministry for Greenland sees merit in the suggestion as fitting in well with its educational program, and indicated it would consider such a request from the Association. At present substantial numbers of Faroese fishermen fish on Icelandic, Norwegian, and German vessels so it is reasonable to expect they would fish on Danish craft. (Fisheries Attache, United States Embassy, Copenhagen, August 25, 1961.)

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FISH FILLETS AND BLOCKS AND FISHERY BYPRODUCTS EXPORTS:

January-May 1961:

Denmark exported 5.8 million pounds of fresh and frozen fish fillets and blocks during May 1961. This represented an increase of 2.3 million pounds as compared with May 1960. Of the total exports in May 1961, the United States received 749,000 pounds, mostly cod and related species.

From January through May 1961, Denmark shipped 5.8 million pounds of frozen fish fillets and blocks to the United States, again mostly cod and related species.

Total exports of fresh and frozen fillets and blocks for January through May 1961 amounted to 29.1 million pounds, an increase of 9.5 million pounds over the same period in 1960. Exports of fillets and blocks of cod and related species increased by 26 percent, and flounder and sole exports increased by 45 percent.

Denmark's Exports of Fresh and Frozen Fish Fillets and Blocks and Fishery Byproducts, January-May 1961 ^{1/2/}				
Product	May	May	Jan.-May	
	1961	1960	1961	1960
..... (1,000 Lbs.)				
Edible products:				
Fillets and Blocks:				
Cod and related species	2,947	2,327	16,734	13,266
Flounder and sole	2,356	1,045	8,193	5,655
Herring	440	2/	3,676	2/
Other	88	147	477	651
Total	5,831	3,519	29,080	19,572
..... (short tons)				
Industrial products:				
Fish meal, solubles, & similar products	2,215	1,928	12,977	10,752
<small>1/Shipments from the Faroe Islands and Greenland direct to foreign countries not included.</small>				
<small>2/Included with "other" category.</small>				

Denmark's exports of fish meal, fish solubles, and other similar products also increased from 1,928 short tons in May 1960 to 2,215 tons in May 1961. Exports of industrial fishery products for the first five months of 1961 were 21 percent greater than those of the same period in 1960. None of those products were shipped to the United States.

In April 1961, Denmark exported almost 4.2 million pounds of fresh and frozen fish fillets and blocks as compared to 5.0 million pounds in the same month of 1960. Shipments to the United States in April this year totaled 644,000 pounds, mostly of cod and related species. April 1961 total exports of fish meal, fish solubles, and similar products of 839 short tons were substantially less than exports of 1,856 tons in April 1960. Note: Also see Commercial Fisheries Review, August 1961 p. 60.

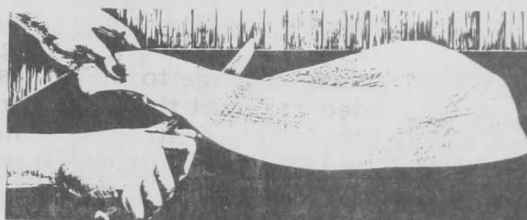
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January-June 1961:

Denmark exported 6.5 million pounds of fresh and frozen fish fillets and blocks during June 1961. This represented an increase of 1.7 million pounds as compared with June 1960. Of the total exports in June 1961, the United States received almost 1.9 million pounds, mostly cod and related species.

From January through June 1961, Denmark shipped 7.7 million pounds of frozen fish fillets and blocks to the United States, again mostly cod and related species.

Total exports of fresh and frozen fillets and blocks January through June 1961 amounted to 35.6 million pounds, an



Denmark (Contd.):

increase of 11.2 million pounds over the same period in 1960. Exports of fillets and blocks of cod and related species increased by 30 percent, and flounder and sole exports increased by 31 percent.

Denmark's Exports of Fresh and Frozen Fish Fillets and Blocks and Fishery Byproducts, January-June 1961 ^{1/}				
Product	June		Jan.-June	
	1961	1960	1961	1960
 (1,000 Lbs.)			
Edible Products:				
Fillets and Blocks:				
Cod and related species	3,740	2,440	20,474	15,706
Flounder and sole . . .	2,039	2,182	10,232	7,837
Herring	485	-	4,161	-
Other	223	2/196	700	2/847
Total	6,487	4,818	35,567	24,390
 (Short Tons)			
Industrial Products:				
Fish meal, solubles, & similar products	9,070	5,080	22,047	15,832

^{1/}Shipments from the Faroe Islands and Greenland direct to foreign countries not included.
^{2/}Includes herring fillets.

Denmark's exports of fish meal, fish solubles, and other similar products also increased from 5,080 short tons in June 1960 to 9,070 tons in June 1961. Exports of industrial fishery products for the first six months of 1961 were 39 percent greater than those of the same period in 1960. None of those products were shipped to the United States.

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January-July 1961:

Denmark exported 5.5 million pounds of fresh and frozen fish fillets and blocks during July 1961. This was an increase of 1.7 million pounds as compared with July 1960. Of the total exports in July 1961, the United States received 1.2 million pounds, mostly cod and related species.

From January through July 1961, Denmark shipped 8.9 million pounds of frozen fish fillets and blocks to the United States, again mostly cod and related species.

Total exports of fresh and frozen fillets and blocks January through July 1961 amounted to 41.0 million pounds, an

Denmark's Exports of Fresh and Frozen Fish Fillets and Blocks and Fishery Byproducts, January-July 1961 ^{1/}				
Product	July		Jan.-July	
	1961	1960	1961	1960
 (1,000 Lbs.)			
Edible Products:				
Fillets and Blocks:				
Cod & related species .	2,325	1,906	22,799	17,612
Flounder and sole	2,619	1,772	12,851	9,609
Herring	406	-	4,567	-
Other	128	2/68	828	2/915
Total	5,478	3,746	41,045	28,136
 (Short Tons)			
Industrial Products:				
Fish meal, solubles, & similar products	4,737	5,864	26,784	21,696

^{1/}Shipments from the Faroe Islands and Greenland direct to foreign countries not included.
^{2/}Includes herring fillets.

increase of 12.9 million pounds over the same period in 1960. Exports of fillets and blocks of cod and related species increased by 29 percent, and flounder and sole exports increased 34 percent.

Denmark's exports of fish meal, fish solubles, and other similar products decreased from 5,864 short tons in July 1960 to 4,737 tons in July 1961. But exports of industrial fishery products for the first seven months of 1961 were 23 percent greater than those of the same period in 1960. None of those products were shipped to the United States.

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MINK FARMERS BUY FOOD FISH:

Low prices for the fourth grade of plaice in August 1961 made it possible for Danish mink farmers to purchase these small food fish at the fish auctions for as low as 5.8 U.S. cents a kilogram (2.6 cents a pound). There are substantial imports of fish waste from Germany for mink food at a price of about 3.62 cents per kilo (1.7 cents a pound) to which the cost of freight must be added. Danish fishermen have been unable to agree on measures to set a minimum price for small plaice and to increase the minimum size. (The United States Embassy, Copenhagen, Fisheries Attache reported on August 25, 1961.)

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RETAIL FISH DEALERS DISCUSS PER CAPITA CONSUMPTION:

At the meeting of the National Organization of Denmark's Retail Fish Dealers on August 21, 1961, in Horsens, the president announced that the per capita consumption of fish in Denmark in 1960 was 14.5 kilos (round weight) or 31.9 pounds, an increase of 3.7 kilos or 8.1 pounds over 1959.

At the previous annual meeting the results of Swedish research indicated that eating fish could decrease the risk of arteriosclerosis. Danish research has now demonstrated that there was a connection between a high level of cholesterol in the blood and the development of arteriosclerosis. In a radio talk, Dr. Erling Lund, a well known Danish physician, stated that it was important that there be eaten greater amounts than heretofore of the fats and oils containing the unsaturated fatty acids such as found in fish.

More fish retailers are installing freezer cabinets but only about 2.2 million pounds of frozen fish were sold in 1960. Fish retailers, like fishing vessel owners, find it difficult to secure labor. The number of independent re-

Denmark (Contd.):

tail fish dealers is decreasing markedly. The plans of the Health Department for regulating the sale of frozen fish were welcomed. A demand for date stamping all quick-frozen fishery products is to be investigated. Regulations governing chain-store operations were pointed to by the Minister of Fisheries as a protection against eventual competition with foreign companies through membership in the Common Market. Another Ministry of Fisheries official reminded the retail dealers that they, as well as fishermen, were eligible for loans from the Danish Fishery Bank.

The per capita consumption is determined annually by the Ministry of Fisheries by adding the production and imports and deducting the exports and dividing the population by the remainder. The very large increase from 1959 to 1960 stimulated a recheck of the figures with the same result. The Ministry official who prepared the figures ascribed the increase to the fact that the depressed fish meal market forced more Danish fishing vessels into producing food fish rather than industrial fish. He also thought there was an increased consumption of fish fillets. (According to a report from the Fisheries Attache, United States Embassy, Copenhagen, dated August 25, 1961.)

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SALES COOPERATIVE HAS GOOD SEASON:

A Danish cooperative marketing agency, which is affiliated with 26 fishery sales cooperatives throughout Denmark, announced at its annual meeting on August 19, 1961, that it had had its best season with sales amounting to 15,300,000 kroner (US\$2.2 million), and a net profit of 130,000 kroner (\$18,900). Half of the profit goes to shareholders in proportion to their deliveries of fish and half to the reserve fund which now totals 440,000 kroner (\$63,800). (An August 25, 1961, report from the United States Embassy, Copenhagen, Fisheries Attache.)



Egypt

ORGANIZATION FORMED TO DEVELOP MARINE RESOURCES:

A decree signed by Egypt's President on September 12, 1961, officially establishing a General Marine Wealth Development Organization, which is to be attached to the Office of the Presidency, was published by the Egyptian press September 13. The press account follows:

"Article 1--A General Marine Wealth Development Organization is to be established and attached to the Presidency. It is to be regarded as an economic establishment governed by Law No. 265 for 1960.

"Article 2--This organization will serve the following purposes:

"1. Contribute to the development of the national economy of the Republic by working out projects for horizontal and vertical expansion of fisheries.

"2. Increase the potentialities of the fishing fleet and improve fish transport; improve fish storage, marketing, diversification of products and scientific and technical research.

"3. Improve fishery cooperatives financially and technically, through participation in establishing them, participation in capital, advancing loans and extending necessary assistance in the light of the general cooperatives policy.

"4. Found or participate in founding establishments and companies and supervising and guiding their activities.

"The Organization may also collaborate with other establishments to achieve its objectives.

"Article 3--The funds of the organization will consist of:

"1. The capital of certain companies which will be defined by Republican decree.

"2. The profits realized by the Organization projects.

"3. The appropriation which will be set aside in the State Budget for the Organization's machinery.

Egypt (Contd.):

"4. Loans and aid to be granted by the State.

"5. Funds raised by organizations and accepted by the board of directors.

German Federal Republic

FISH MEAL PRICES, SEPTEMBER 8, 1961:

Prices reported at Hamburg Commodity Exchange as of September 8, 1961, for fish meal delivered ex-Hamburg warehouse, or c.&f. West German sea port were as follows:

Type of Fish Meal	Protein Content (%)	Delivery	DM/Metric Ton <u>1/</u>	US\$/Short Ton
German fish meal	50-55	loco/ prompt <u>2/</u>	555,00	125,87
" " "	55-60	" " <u>2/</u>	565,00	128,14
" " "	60-65	" " <u>2/</u>	580,00	131,54
" " " std. brands	60-65	Sept. 1961	618,50	140,28
" herring meal	64-68	prompt <u>3/</u>	630,00	142,88
Peruvian fish meal	65-70	loco <u>2/</u>	532,50	120,78
" " "	65-70	Oct. 1961-Apr. 1962	545,00	123,61
Angola fish meal	65-70	Sept. 1961	610,00	138,35
Portuguese fish meal	50-55	prompt/Oct. 1961	545,00	123,61
Icelandic herring meal	70-75	loco/ Oct. 1961 <u>2/</u>	660,00-670,00	149.69-151.76

1/Values converted at rate of 4.0 deutsche marks equal US\$1.
2/"Loco" means where and as it is at the time of sale, and all subsequent expenses to be at buyer's account.
3/Delivered coastal location.

"Article 4--The Board of Directors of the Organization will consist of a chairman and a number of members to be appointed by a Republican decree defining the remuneration of each director and the term of their appointment.

"Article 5--The Board of Directors of the Organization will be the supreme authority to supervise its affairs and plan its policy. It will have the right to take any measures deemed necessary to achieve the Organization's aims.

"The decree provides that the financial year for this organization shall begin on July 1 and end at the end of June the following year.

"It is also stipulated that a further Republican decree will be issued establishing the organization's budget.

"It also provides that the Director of the Organization shall be appointed by a Republican decree fixing his remuneration.

"The decree comes into effect from the date of its promulgation in the 'Official Journal'."

The Hydrobiological Institute is expected to be transferred from the Ministry of Agriculture to a new General Marine Wealth Development Organization, attached to the office of the Presidency. (United States Consulate in Alexandria, September 14, 1961.)



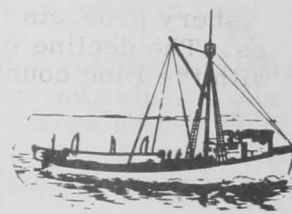
As compared with August 4, 1961, fish-meal prices on the Hamburg exchange on September 8, 1961, were mixed, with both domestic and imported fish meal somewhat higher on the average except for Peruvian meal which was down about \$4-5 a short ton. (United States Consulate, Bremen, September 12, 1961.)



Ghana

SOVIETS AGREE TO SUPPLY FISHING VESSELS:

The Government of Ghana signed an agreement with the Soviet Union in Accra on August 27, 1961, under which the Soviets will supply 10 fishing vessels valued at £G1,670,000 (\$4,676,000). The vessels will be delivered within three years, the first deliveries arriving in 1962. Each vessel will carry a crew of 20 and have a capacity for 185 metric tons of fish. The agreement was signed on behalf of the Ghana Government Minister of Agriculture, and the Trade Councelor of the Soviet Embassy signed for the Soviet Union. (From United States Embassy, Accra, August 31, 1961.)



Greece

CONTROLS ON CANNED FISHERY PRODUCTS IMPORTS:

Canned fish products are included in Greek import commodity List F-100 which covers commodities for which a cash deposit of 140 percent of c.i.f. value (100 percent of c.i.f. invoice value plus a 40 percent deposit of c.i.f. value against import duties and taxes) is required at the time of application for an import approval. This requirement applies to all commodities included in List F-100 regardless of country of origin. However, there is no provision in current licensing regulations which requires importers to make the cash deposit within prescribed time-limits prior to shipment of the goods involved. The advance deposit may be made at any time before the date of shipment of the goods, which is evidenced by the date of issuance of the relevant bill of lading. Accordingly, if a Greek importer were notified promptly (i.e. by cable) of the scheduled date of shipment of his order he could make the deposit immediately before that date. What is important and should be borne in mind by foreign suppliers is that a prior-to-shipment import approval is essential in the case of shipments consigned to Greek importers. Settlement of shipping documents covering unauthorized shipments (i.e. goods not covered by a validated import approval issued prior to shipment) may be effected only against payment of onerous cash penalties.

There is no practical way whereby foreign suppliers of canned products may assist their Greek customers by financing advance cash deposits. Greek regulations do not permit Greek banks to finance these products. Moreover, foreign exchange remittances made to beneficiaries in Greece cannot be re-exported under currency control regulations. Accordingly there is no legitimate way whereby foreign suppliers could recover amounts remitted to their customers.

The advance deposit requirement constitutes a burden on the trade of all foreign countries shipping to Greece. However, it is in line with the Greek Government's over-all trade policy--in effect since the liberalized trade system was adopted in 1953--of seeking to slow down the tempo of imports by placing added burdens on the cash assets of importers, thereby reducing the volume of imports which they can finance on a cash basis.

Greece in its foreign trade relations continues to run a large deficit in its merchandise balance; for example, Greek exports in 1960 covered only about 40 percent of the value of imports into the country. It is hardly likely, therefore, that the Greek Government will consider altering its import regulations designed to limit the inflow of foreign products in the near future, the United States Embassy in Athens reported on August 29, 1961.



Iceland

FISHERY PRODUCTS EXPORTS TO SOVIET BLOC, JANUARY-JUNE 1961:

In the first six months of 1961, Iceland exported 16,757 metric tons (valued at US\$3,150,000) of fishery products to the Soviet Bloc countries. The decline in Iceland's volume of trade with the Bloc countries which occurred during the first half of 1960 continued during January-June 1961. Over-all trade in both directions with the Bloc dropped from 24.2 percent of total trade (imports and

exports) with all countries to 18.0 percent. The Bloc share of total trade (imports and exports) during the first half of 1959 amounted to 34.0 percent.

Icelandic Exports to Soviet Bloc, January-June 1961			
Country and Commodity	Quantity	Value f.o.b.	
	Metric Tons	1,000 IKr.	US\$ 1,000
Czechoslovakia:			
Frozen fish	1,571.0	23,285	613
Canned fish	60.6	3,569	94
Frozen herring	4,128.8	21,634	569
Fish meal	354.2	1,546	41
Herring meal	645.9	2,829	74
Cod-liver oil	474.2	4,401	116
Total	7,234.7	57,264	1,506
East Germany:			
Frozen herring	377.5	1,867	49
Salt herring	2,658.5	21,030	553
Total	3,036.0	22,897	602
Hungary:			
Canned fish	1.3	177	5
Cod-liver oil	31.0	288	8
Total	32.3	465	13
Poland:			
Frozen herring	1,870.7	9,757	257
Salt herring	2,000.0	14,890	392
Fish meal	402.7	1,694	45
Herring meal	302.1	1,284	34
Cod-liver oil	130.0	1,182	31
Total	4,705.5	28,807	759
Rumania:			
Frozen herring	30.4	151	4
Salt herring	600.0	4,161	110
Total	630.4	4,312	114
U. S. S. R.:			
Frozen herring	648.7	2,598	68
Salted herring	351.4	2,583	68
Total	1,000.1	5,181	136
China:			
Cod-liver oil	118.0	1,108	29
Grand Total (All Countries)	16,757.0	120,034	3,159

Note: Values converted at rate of 38 kronur equal US\$1.

The Bloc share of all Icelandic exports (about 92.5 percent was fishery products) decreased from 31.9 percent during the first six months of 1960 to 11.3 percent during January-June 1961. Imports from the Bloc increased slightly from 20.3 percent to 23.2 percent, comparing the same periods.

While exports to Czechoslovakia and Poland during the first six months of 1961 increased considerably, there was a sharp decline in exports to East Germany and the Soviet Union, in particular. Frozen fish accounted for most of the decline in exports to those countries. During the first half of 1960 the Soviet Union was the leading buyer of frozen fish and the quantity purchased by East Germany was only exceeded by the United States. As of the end of June this year, no frozen fish had been exported to the Soviet Union or East Germany. (United States Embassy in Reykjavik, August 23, 1961.)

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Iceland (Contd.):

FISHERY TRENDS, MID-AUGUST 1961:

The ex-vessel value of Iceland's 1961 summer herring landings has been estimated at 238.1 million kronur (US\$5.4 million at rate of 43 kronur to US\$1). It is difficult to estimate the final export value of the products derived from the landings because of frequent fluctuations in meal and oil prices; however, it probably will be about 500 million Icelandic kronur (US\$11.6 million). This has been one of the best seasons, both with regard to the quantity and quality of the herring. On August 19, 1961, the total herring catch amounted to 200,263 metric tons as compared with 104,577 tons for the same period of 1960. It was reported by the Icelandic press on August 17 that an agreement with the Soviet Union for 20,000 additional barrels of salted herring had been signed.

The press also reported on August 22 the approval of an Icelandic proposal at the Nordic Council Economic Affairs Committee in Oslo to establish a committee to discuss the problem of fisheries in the Nordic countries in connection with membership in the European Economic Community. The committee was to convene in Reykjavik early in September, the United States Embassy in Reykjavik reported on August 24, 1961.



Italy

JOINT ITALIAN-JAPANESE COMMITTEE TO INVESTIGATE FROZEN TUNA REJECT CLAIMS:

Japan early in September 1961 formally ratified the proposal to form a joint Italian-Japanese investigation committee to study the problem of frozen tuna reject claims in Italy. The three members appointed to represent Japan consist of one representative of a large Japanese fishing company located in Genoa, a representative of another Japanese fishing company in Milan, and a third member who will represent the Japan Export Trade Promotion Organization (JETRO).

The committee will be located at Genoa, Italy, and was expected to discuss at its first meeting freezing conditions aboard Japanese fishing vessels and supervision exercised by Italy after the Japanese frozen tuna are landed on the docks. Tenure of the committee is six months. (Suisan Keizai Shimbun, September 7, 1961.)



Japan

EXPORTS OF CANNED TUNA IN OIL, 1956-60:

Japanese exports of canned tuna in oil of 1,340,469 cases during calendar year 1960 were 20,608 cases or 15 percent less than in

Table 1 - Japanese Exports of Canned Tuna in Oil by Destination

Destination	1960	1959	1958	1957	1956
..... (Actual Cases)					
West Germany	605,239	415,365	265,886	252,891	144,972
Canada	175,177	153,093	145,844	143,626	127,922
Switzerland	111,413	105,915	76,302	110,118	135,308
Belgium	50,765	87,738	67,110	72,389	84,689
Netherlands	38,774	44,595	32,102	51,429	61,861
Lebanon	48,139	67,263	22,503	58,736	26,210
Saudi Arabia	32,532	71,581	49,625	48,902	23,982
Britain	17,559	69,143	41,570	72,849	22
Italy	8,188	43,212	30,803	150,302	75,864
Others 1/	252,683	303,172	140,511	223,733	197,446
Total	1,340,469	1,361,077	872,256	1,184,975	878,276

1/Includes exports to United States, which were not shown separately.

Table 2 - Japanese Exports of Canned Tuna in Oil by Species, 1956-60

Species	1960	1959	1958	1957	1956
..... (Actual Cases)					
Albacore	337,640	268,454	242,972	405,371	238,872
Skipjack	166,629	668,039	315,779	163,880	156,812
Other tuna	836,200	424,584	313,505	615,724	482,592
Total	1,340,469	1,361,077	872,256	1,184,975	878,276

Japan (Contd.):

1959, but 468,213 cases or 35 percent more than in 1958.

West Germany was the principal buyer with 605,239 cases, or 45 percent, of the total exports. While the exports of the skipjack and albacore packs have fluctuated substantially, there has been a steady increase in the exports of other tuna from 1958 through 1960.

* * * * *

EXPORTS OF CANNED TUNA IN OIL, APRIL-JULY 1961:

Data compiled by the Export Canned Tuna Producers Association show that the amount of canned tuna in oil approved for export April-July 1961 amounted to over 521,000 actual cases, equivalent to about 390,000

However, on September 7, the Canned Tuna Packers Association voted on an increase of 50 cents a case for canned albacore. This means that tuna packers and exporters will now have to resolve their differences over the amount of the increase.

Pending developments at the forthcoming price negotiations, the Packers Association may bring up the question of raising once again the price of canned light meat tuna in brine. Present price of canned light meat tuna in brine (not including yellowfin) is \$7.50 a case, and canned yellowfin \$7.60 a case, f.o.b. Japan. (Suisan Tsushin, September 6 & 8, 1961.)

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CANNED TUNA IN BRINE EXPORT PRICE RAISED:

At a meeting on September 19, 1961, the Japan Canned Tuna Packers Association of-

Japanese Exports of Canned Tuna in Oil, April-July 1959-61 and Annual Totals for 1959-60

Country of Destination	1961	1960		1959	
	April-July	April-July	Fiscal Year Total (April-March)	April-July	Fiscal Year Total (April-March)
 (Actual Cases)				
Germany	166,218	122,658	438,906	126,436	484,808
Canada	107,405	67,998	151,754	48,720	160,385
Netherlands	45,531	27,721	62,999	30,996	85,863
Switzerland	27,431	26,709	63,573	11,933	36,918
Belgium	19,889	22,042	53,197	37,705	92,360
England	12,754	10,150	18,489	26,954	105,135
Italy	4,010	1,800	15,337	19,354	26,584
Other countries	138,017	58,646	279,561	166,597	485,063
Total	521,255	337,724	1,083,816	468,695	1,477,116

standard cases (48 7-oz. cans). This represents a considerable increase over the same period in 1960 and 1959 when exports totaled 337,724 and 468,695 actual cases, respectively. (Suisan Tsushin, September 11, and April 24, 1961.)

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EXPORT PRICE OF CANNED ALBACORE TUNA TO BE RAISED:

The Japan Canned Foods Exporters Association's Tuna Standing Committee met on September 5 to discuss a price increase for canned albacore tuna in brine. The committee agreed on a new price of \$9.40 a case (48 7-oz. cans) f.o.b. Japan. This is an increase of 25 cents a case from the old price of \$9.15 a case.

Finally voted to accept the agreement arrived at the joint meeting held on September 14-15 with the Exporters Association to raise the export price of canned whitemeat tuna in brine by 40 cents a case for September's sale and an additional 10 cents a case beginning in October. The Packers Association also agreed on raising the export price of canned lightmeat tuna in brine (not including yellowfin) by 10 cents a case. Thus, the new export price of canned white-meat tuna in brine was \$9.55 a case f.o.b. Japan for September and was \$9.65 a case beginning in October. The raising of the export price of canned lightmeat tuna in brine other than canned yellowfin by 10 cents a case brought the price of that pack to the same level as that for canned yellowfin, or \$7.60 a case f.o.b. Japan, effective since late June.

Japan (Contd.):

Some members of the Packers Association were concerned that the export price of canned yellowfin was not raised also, and agreed to the new prices only after attaching the condition that every effort should be made to sell, as quickly as possible, the 79,000 cases of canned yellowfin held in stock as of mid-September 1961.

At the sale of canned tuna scheduled for September, it was expected that 100,000 cases each of canned whitemeat tuna and canned lightmeat tuna would be offered. (Suisan Tsushin September 16, and 20, 1961.)

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FROZEN TUNA EXPORTS TO U. S.,
APRIL 1-AUGUST 19, 1961:

The Japan Export Frozen Tuna Products Association has furnished the following statistics on frozen tuna exports to the United States directly from Japan for April 1-August 19, 1961. Exports of yellowfin tuna totaled 14,186 short tons. Price range (per short ton f.o.b. Japan) for size categories of yellowfin were as follows: 20-80 pounds (gilled and gutted) \$270-\$285; 20-100 pounds \$265-\$290; 80-100 pounds \$265-\$280. Yellowfin dressed \$275-\$285, fillet \$275-\$300. Exports of frozen albacore were 5,137 short tons with a price range of \$320-\$360 per ton.

Japan's export target of frozen tuna of Atlantic origin for April 1-October 31, 1961, was 11,950 short tons, consisting mostly of albacore. Price range at transshipment point (per ton f.o.b.) Cristobal or Port of Spain was: albacore \$270-\$345; yellowfin (gilled and gutted) \$240-\$280; yellowfin dressed \$220-\$270. Data not available on quantity of tuna transshipped to the United States from Atlantic.

For April 1-October 31, 1961, Japan's export target for Atlantic frozen tuna to Italy is 17,831 long tons; Yugoslavia 5,292 long tons; other European countries 2,649 long tons. Price range f.o.b. transshipment points (Dakar or Freetown): albacore \$265-\$300 per long ton; yellowfin (gilled and gutted) \$215-\$240; yellowfin dressed \$230-\$260; yellowfin fillet \$240. These were the prevailing price ranges reported during August. (United States Embassy, Tokyo, September 13, 1961.)

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HIGHER EXPORT PRICES FOR
ATLANTIC OCEAN FROZEN
TUNA CONSIDERED:

The Atlantic Ocean Tuna Committee of the Frozen Food Exporters Association of Japan met on September 7, 1961, to discuss amounts and prices of Atlantic frozen tuna to be exported between October and December 1961. The Tuna Committee agreed to raise the price of yellowfin and big-eyed tuna from US\$5 to \$15 a metric ton; establish two price classifications, one for big-eyed tuna and the other for yellowfin tuna, with albacore and bluefin tuna under the yellowfin classification; and sell lots of mixed fish with more than 50 percent yellowfin (including albacore and bluefin) at the same price as yellowfin. The Committee also set the amount of frozen tuna to be exported to Italy for the month of October at 1,600 metric tons and for November at 1,000 tons, but did not release a figure for December.

Decisions reached by this Committee are not final. This Committee as of early September examined prices by markets and was expected to come out with definite data the week of September 11 on the amount of the price increase it will propose, and later plans on holding a joint meeting with producers to discuss the matter. (Suisan Keizai Shimbun, September 10, 1961.)

Export prices (c.i.f.) by markets furnished by the Tuna Committee for Atlantic frozen tuna follow:

Exports to:	Yellowfin	Big-eyed
	.. (Per Metric Ton) ..	
Italy	\$290	\$270
Yugoslavia	\$300	\$285
Czechoslovakia	\$290	\$275
Africa (Libya, Tunisia, etc.) ..	\$300	\$285

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INCREASE REPORTED IN
FROZEN TUNA PRICES:

The August 24, 1961, Japanese periodical Suisan Tsushin reported that the catch of yellowfin tuna by the Japanese had been light. Therefore, the price of frozen yellowfin for export to the United States was rising day by day. As of August 24, gilled and gutted frozen yellowfin was reported selling at US\$290 a short ton f.o.b.--an increase of \$50 or so from the same date a year ago. Fillets were about \$300 a ton, while loins sold as high as \$630 a ton. The price of albacore tuna also was advancing and was reported to have reached \$360 a ton.

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Japan (Contd.):

FROZEN TUNA EXPORT
PRICES AT NEW HIGH:

Japanese prices of frozen tuna for export to the United States in mid-September 1961 were reported to have reached a new high. Prices f.o.b. Japan are: frozen yellowfin gilled and gutted \$300 a short ton, yellowfin fillets \$310 a ton, loins \$420 to \$430 a ton, albacore about \$370 a ton.

As of mid-September the trend was for increased exports of fillets to the United States, as well as loins. Also, exports of tuna other than albacore and yellowfin were on the increase, indicating a shortage of tuna in the United States. (Suisan Tsushin, September 18, 1961.)

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TUNA MOTHERSHIP RETURNS
WITH FULL TRIP:

A Japanese tuna mothership No. 3 Tenyo Maru (which departed for the South Pacific tuna area in early May) arrived at the port of Shimizu, Shizuoka Prefecture, on September 7, 1961. The vessel caught a total of 2,868 metric tons of albacore, 1,974 tons of yellowfin, and 4,843 tons of spearfish, sharks, and other species of tuna. (Suisan Keizai Shimbun, September 7, 1961.)

Translator's Note: Available catch reports from Japanese trade journals show that for the months of May and June, yellowfin predominated in the catch of the tuna motherships Tenyo Maru and Nojima Maru, but their catch for the season consisted mostly of albacore. The Nojima Maru, caught 897 tons of yellowfin and 465 metric tons of albacore by late June. As of early September, that vessel was reported to have caught 3,520 metric tons of albacore and 1,380 metric tons of yellowfin, which means that for the months of July, August, and part of September the vessel caught about 3,000 tons of albacore and slightly less than 500 tons of yellowfin. The Tenyo Maru was estimated to have caught 1,900 tons of albacore and slightly less than 700 tons of yellowfin during the months of July and August.

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TUNA MOTHERSHIP RETURNS
FROM FISHING GROUNDS:

The Japanese tuna mothership Nojima Maru (8,503 gross tons) was expected to reach her catch target of 7,500 metric tons

of frozen fish, primarily tuna, around September 22 and was scheduled to return to Kobe, Japan, on October 5, 1961. The vessel fished in the South Pacific near the Fiji Islands.

Nojima Maru was expected to bring back 4,100 metric tons of frozen fish, of which 2,000 tons would be frozen albacore and 500 tons frozen yellowfin. Earlier in the season, part of the Nojima Maru's catch was shipped directly to Japan (three shipments) and one transshipment of 770 metric tons of frozen tuna was made to San Francisco. Including these shipments, Nojima Maru caught a total of 3,520 metric tons of albacore and 1,380 metric tons of yellowfin.

Catch of albacore was exceedingly good this year as compared to previous years, and in view of prevailing firm tuna prices the Nojima Maru is expected to show a profit for the first time. (Suisan Tsushin, September 11, 1961.)

Translator's Note: Two other Japanese tuna motherships are still on the fishing grounds: The Koyo Maru (7,500 gross tons) with a catch target of 7,500 metric tons of fish, mainly tuna; and the Jinyo Maru (7,200 gross tons) with a catch target of 3,500 metric tons of tuna. Both motherships departed for the South Pacific tuna fishing grounds near the Fiji Islands in August.

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FROZEN TUNA FROM FIJI ISLANDS
TRANSSHIPPED TO THE UNITED STATES:

A Japanese fishing company, which operates the tuna mothership Nojima Maru (8,503 gross tons), transshipped 860 short tons of the mothership's catch to San Francisco via Suva, Fiji Islands. The carrier vessel Tsu-kishima Maru (1,170 gross tons) carrying this shipment departed Suva on August 24.

The carrier vessel (No. 35 Banshu Maru) of another Japanese fishing company, was due to pick up 750 short tons of frozen tuna from the same company's tuna mothership Koyo Maru for delivery to the United States. This transfer was also to take place at Suva, and the Banshu Maru departed Suva on September 6. This vessel was scheduled to transport an additional 750 short tons of frozen tuna to the United States in early October. (Suisan Keizai Shimbun, September 7, 1961.)

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Japan (Contd.):

**FISHERY AGENCY STUDYING
RELAXATION OF REGULATIONS
ON PORTABLE VESSELS FOR
TUNA MOTHERSHIPS:**

The Japanese Fishery Agency in August 1961 was re-examining the licensing policy for portable-vessel-carrying tuna motherships so as to revise it to make it more realistic. Under the present system, which was approved in April of this year, owners of large tuna vessels who wish to fish with one portable vessel (size limited to 20 tons) must withdraw from the tuna fishery one distant-water tuna fishing vessel; those who wish to fish with two portable vessels must put up the equivalent of 50 tons of distant-water fishing vessel rights, and they can utilize the unused tonnage of the vessel withdrawn from the tuna fishery to enlarge other medium and distant-water tuna vessels under the tonnage replacement system. As for owners of vessels who fished with one portable vessel prior to the enactment of the present regulations and who wish to fish with two portable vessels, they are required to put up 25 tons of distant-water tuna vessel rights for the second portable vessel.

Under the direction of the Fishery Agency, the 16 companies planning to operate portable-vessel-carrying tuna motherships formed an association whereby this association would purchase distant-water fishing vessel rights and allocate those rights to its members by lottery. This would then eliminate unnecessary competition between companies to purchase vessel rights, which otherwise would drive the market for vessel rights higher. A total of 31 large tuna vessels was registered with the association, and the association was to have completed procuring distant-water tuna fishing vessel rights by the end of August. As of late August, a total of 15 vessels (out of the 31 vessels listed) has been licensed to operate as portable-vessel-carrying tuna motherships, each carrying one portable vessel.

The association is reported not to have been successful at all in procuring vessel rights for replacement purposes. The association claims the regulations are too strict and wants them changed. It also claims the price of distant-water tuna vessel rights is very high. Then, too, none was available for sale, which made it impossible for the association to accomplish its objective before the August 31 deadline.

The Fishery Agency realizes that present requirements are too stringent and feels that the Agency should help the association along in developing the portable-vessel-carrying tuna mothership industry and is expected to liberalize existing regulations. However, the Fishery Agency does not want to jeopardize that segment of the tuna fishing industry connected with the operation of ordinary tuna fishing vessels and will make a final decision after consulting with the National Federation of Tuna Fishing Cooperative Associations. (Suisan Keizai Shimibun, August 2; Nippon Suisan Shimibun, August 21, 1961.)

Translator's Note: The cost per ton of a distant-water tuna vessel right is said to be well over \$800. This means that if a boat owner wishes to build two portable boats, he must, under the present regulations, procure the right to 50 tons of a distant-water tuna fishing vessel for replacement purposes. At present prices, this would cost him at least \$40,000 (50 x \$800) before he can even start building two portable boats of less than 20 tons each.

The Fishery Agency has not yet decided on the disposition of a Japanese fishing company's large tuna vessel No. 21 Kuroshio Maru, which was specially licensed to fish on an experimental basis with 6 portable vessels last year. The question is whether it should permit this vessel to operate this year with 5 portable vessels or with 4 portable vessels. (Suisan Keizai Shimibun, August 2, 1961.)

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**CANNED SALMON 1960 PACK
CARRY-OVER AS OF MARCH 31, 1961:**

As of March 31, 1961 (end of fiscal year 1960), the carry-over from the Japanese 1960 canned salmon pack amounted to 219,390 cases (48 1-lb. cans per case). The carry-over included 188,110 cases of sockeye or red salmon, 15,540 cases of silver, 12,230 cases of king, 3,050 cases of pink, 100 cases of chum, and 360 cases of salmon tidbits. Included in the total carry-over was 12,500 cases of red salmon packed from frozen salmon purchased from the United States. (United States Embassy in Tokyo, September 12, 1961.)

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**CANNED SHRIMP EXPORTED TO U. S.
FOR FIRST TIME:**

A large Japanese fishing firm began to export 5,000 cases of canned shrimp to the United States, for the first time in July 1961 and completed the entire shipment by mid-August 1961. It was rumored that the selling price was not quite \$15 per case f.o.b. as originally planned. In August, some 10,000 cases were expected to arrive from the North Pacific shrimp factoryship and the company intends to export them all to the United States and Europe.

The company which operated the world's first shrimp-canning factoryship in the Bering Sea this year, will handle more than half of the export quantity and the remainder through 2 or 3 large exporters. Three other large fishing firms are pushing their plans to also fish and can shrimp in the Bering Sea next year with newly-acquired machinery.

With the canned shrimp, frozen shrimp will also be exported to the United States through San Francisco, and to Australia. Up to the present time, the firm operating this year's factoryship has been exporting annually some 1,000 metric tons of frozen shrimp produced in the Seto Inland Sea and Kyushu to the United States. Poor shrimp fishing in Japan this year has made it necessary for the firm to export the shrimp caught in the North Pacific.

The shrimp-canning factoryship (Eijin Maru) production target is 50,000 to 60,000 cases of canned and 3,500 tons of frozen shrimp. (Suisan Keizai Shimibun, August 2, 1961.)

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Japan (Contd.):

FROZEN SHRIMP IMPORTS FROM MEXICO VIA U. S. UP SHARPLY:

Since 1959, Japanese shrimp imports have shown a marked increase. In that year total shrimp imports amounted to 529,000 pounds, with Communist China being the principal supplier with 508,800 pounds (96 percent) and the balance from South Korea.

In 1960, Japanese shrimp imports rose to 1,370,000 pounds, with South Korea, Communist China, and Hong Kong accounting for 91 percent of the total. Imports in pounds were: South Korea 270,000, Communist China 454,000, Hong Kong 433,000, Kuwait 10,000, Australia 2,000, United States domestic 90,000, and Mexican re-exports from the United States 115,000.

During the first 5 months in 1961, Japan imported 1,420,000 pounds of shrimp which is more than for the entire year of 1960. Imports of shrimp of Mexican origin and re-exported from the United States accounted for 1,150,000 pounds or 81 percent of all shrimp imports for that period. Imports from other countries were, in pounds: United States domestic 124,000, South Korea 14,000, Communist China 31,000, Hong Kong 55,000, Iran 10,000, British North Borneo 18,000, and El Salvador 19,000. (United States Embassy, Tokyo, report dated August 23, 1961.)

Note: Information did not indicate type of shrimp, but most of the imports and re-exports from the United States were frozen shrimp.

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PRODUCTION REPORT FROM NORTH PACIFIC SHRIMP FACTORYSHIP AS OF AUGUST 2:

The Japanese shrimp factoryship Eijin Maru operating in the North Pacific reported that as of August 2, 1961, it packed 30,952 cases of canned shrimp and 3,000 metric tons of frozen shrimp. This was 50 percent of its production target.

Operations have proved to be satisfactory. In the beginning, the vessel canned about 250 cases a day, but beginning early in August the pack was increased to 600 cases a day.

Three other Japanese fishing companies are reported interested in North Pacific shrimp fishing and they are planning to operate shrimp factoryships next year. (Suisan Keizai Shim bun, August 17, 1961.)

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DEVELOPMENTS IN BERING SEA BOTTOMFISH FISHERY:

Japanese press reports appearing earlier this year indicated that 21 fleets with over 200 catcher vessels were planning to fish with long lines, trawls, and gill nets off the shelf extending out from the Russian coast between Cape Navarin and Cape Olyutorski. Subsequent news reports indicated that these fleets concentrated on halibut at the beginning of the season. As catch of halibut declined, they switched to fishing for sablefish (black cod), then for herring.

Catch of herring in August was reported to be good with some fleets averaging 200 tons a day. However, as of early September, saury fishing in Japan was in full swing, causing a sharp drop in the price of herring. The Bering Sea fleets in September were reported to have switched back to catching sablefish and other bottomfish. Reports indicate that many of these vessels may wind up the season in the red this year. (Source: Various Japanese periodicals.)

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EXPERIMENTAL FISHING SOUTH OF ALASKA PENINSULA IN 1960:

In 1960, three Japanese fishing companies were issued permits by the Fishery Agency to conduct exploratory fishing south of the Alaska Peninsula (off Kodiak Island). Operations were carried out August 20-September 25 in waters north of 53°30' north latitude and between 155° and 165° west longitude.

Seven vessels of the 70- to 80-ton class were employed in the exploratory operations.

The types of gear used were the Danish trawl, gill nets, longline, and midwater trawl. A total of 157 drags were made with the Danish trawls of which 53 were unsuccessful because of breaks in the nets caused by fouling on rocky bottom. The number of gill-net sets totaled 34, of which 23 were set on the ocean floor and the remainder were fished on the surface. Eighteen sets were made with long lines using a total of 1,015 baskets of gear. No success was had with midwater trawls or surface gill nets.

A total of 306.9 metric tons of fish were caught with rockfish, arrow-toothed halibut, and Alaska pollock accounting for 94 percent of the total catch. In order of importance in total quantity taken was rockfish with 150.3 metric tons, arrow-toothed halibut 79.5 tons,

Japan (Contd.):

Alaska pollock 57.9 tons, sablefish 10.2 tons, cod 6.7 tons, flounder 1.6 tons, and halibut 0.7 tons. Herring, the principal species sought, were not present in the area fished or, if present, were unavailable to the gear fished.

The Danish trawl caught 98.6 percent of the total catch followed by long lines with 1.1 percent and bottom gill nets 0.3 percent.

Regulations by the Fishery Agency prescribed that all halibut and salmon taken during the operations were not to be retained. It was reported that the halibut taken, together with 1 red salmon and 3 pink salmon were released.

Early in 1961, the same three companies submitted applications to the Fishery Agency for continuation of the exploratory operations which were started in 1960. These applications in August 1961 were under study. (From an August 16, 1961, report submitted by the Fisheries Attache, United States Embassy, Tokyo.)

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ENTRY OF DUTY-FREE FISH MEAL PRODUCED BY FACTORYSHIP OFF ANGOLA PERMITTED:

Following the announcement that a Japanese fishing firm planned on dispatching its fish meal factoryship Renshin Maru (14,094 gross tons) to the waters off Angola, the question was raised whether an import duty should be placed on the fish meal produced by the company's factoryship and brought back to Japan, inasmuch as the company planned on utilizing Angolan fishing vessels as catcher vessels. After fully considering this matter, the Japanese Government has decided to permit the free entry of fish meal produced by this company's factoryship since Peruvian fish meal is presently being entered free of duty into Japan. (Suisan Keizai Shimbun, September 9, 1961.)

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EXPORTS OF CANNED CRAB MEAT, 1956-60:

Exports of canned crab meat (including king, kegan, hanasaki) by Japan in 1960 amounted to 483,274 cases (48 8-oz. cans) or about 14.8 percent less than the 1956-60 average of 567,315 cases. The United States and the United Kingdom were Japan's best customers for canned crab meat. Purchases by those two countries varied between a

low of 74.4 percent in 1960 to a high of 89 percent in 1956. Of Japan's total exports, the United States imported between a high of 52 percent in 1958 and a low of 46 percent in 1960.

Table 1 - Japan's Exports of Canned Crab Meat (all species), 1956-1960

Country of Destination	1960	1959	1958	1957	1956
. (Cases of 48 8-oz. Cans)					
United States . . .	222,667	308,319	297,628	304,522	257,300
United Kingdom . .	135,785	192,370	181,802	244,697	210,026
France	42,900	15,307	722	445	-
Hawaii	6,671	8,268	7,813	5,117	5,151
Canada	3,021	11,355	7,562	10,438	10,860
Other European Countries	46,820	50,136	53,579	48,857	17,664
So. & Central America	1,486	1,819	1,013	1,122	613
Asia	1,593	2,148	305	12,278	11,132
Australia	19,090	13,421	18,788	15,543	9,278
Africa	1,668	1,995	2,022	2,887	1,091
Near East	896	756	1,478	3,177	1,239
Others	677	863	395	-	-
Total	483,274	606,757	573,107	649,083	524,354

Table 2 - Japan's Exports of Canned Crab Meat by Species, 1956-1960

Species	1960	1959	1958	1957	1956
. (Cases of 48 8-oz. Cans)					
King crab	306,044	488,025	447,290	399,113	223,124
Kegani crab . . .	169,507	108,868	113,309	239,827	289,871
Hanasaki crab . .	7,723	9,864	12,508	10,143	11,359
Total	483,274	606,757	573,107	649,083	524,354

Table 3 - Japanese Exports of Canned Crab-Meat to U. S. by Species, 1956-1960

Species	1960	1959	1958	1957	1956
. (Cases of 48 8-oz. Cans)					
King crab	170,708	271,515	256,917	227,360	160,785
Kegani crab . . .	51,659	36,004	40,178	76,912	93,605
Hanasaki crab . .	300	800	533	250	2,910
Total	222,667	308,319	297,628	304,522	257,300

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FISHERY LANDINGS AT YAIZU, AUGUST 1961:

Landings of tuna and other fish at the important Japanese tuna port of Yaizu during August 1961 totaled 7,628 metric tons; 1,779 tons, or 23 percent more than for August 1960. The value of the August 1961 landings was US\$1,890,952, a gain of \$59,333 or 3.2 percent over the August 1960 value. Ex-vessel prices for tuna continued to average higher than those paid a year ago.

Yaizu Fishery Landings, August 1961

Species	Metric Tons
Tuna:	
Albacore	149
Skipjack	3,152
Other	3,846
Mackerel	87
Other	394
Total August 1961	7,628
Total August 1960	5,849

Japan (Contd.):

Landings of all fish at Yaizu this year during January-August totaled 91,621 tons valued at \$23,541,666 ex-vessel--3,260 tons more than last year in quantity and \$3,363,750 more in value. (Suisan Keizai Shimbun, September 11, 1961.)

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LARGE FISHING FIRM SURVEYS
SITES FOR ATLANTIC BASES:

The chief of the trade section of a large Japanese fishery firm left Tokyo on September 19, 1961, to make a survey of possible sites for constructing fishing bases in the Atlantic Ocean area. He expected to visit such places as Dakar, Las Palmas (Canary Islands), and Guatemala, but would first visit Las Palmas where his company plans to build a cold-storage plant. (Nippon Suisan Shimbun, September 18, 1961.)

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PRODUCTION OF FISH SAUSAGE
AND HAMS INCREASES:

Production of fish (tuna and tuna-like are generally the principal ingredients) ham and sausages in Japan for the first six months of 1961 was estimated at 36,200 metric tons. This represents an increase of about 30 percent over the same period last year, when production totaled 27,700 metric tons. Production of fish hams showed the greatest increase, from 5,300 tons in January-June 1960 to 7,500 tons in the same period of 1961, or about a 42 percent increase. Fish sausage production this year totaled 28,700 tons, as compared to 22,400 tons last year, an increase of about 28 percent.

Hopes were held of producing over 100,000 tons of fish sausages and fish hams this year (1960 production was 85,500 tons), but it seems that this target may be somewhat difficult to achieve. Production was down in February and March (tuna-like fishes which are used extensively in the production of fish sausages and hams were in very short supply at that time) but picked up in April. Production for June 1961 exceeded by 60 percent that of June 1960. The increase in 1961 production is attributed primarily to the establishment of a number of large new fish sausage-ham plants. (Suisan Keizai Shimbun, September 10, 1961.)

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REFRIGERATED CARRIER VESSELS
UNDER CONSTRUCTION:

The refrigerated carrier vessel Kazushima Maru (3,800 gross tons), which is being built for one of Japan's large fishing companies, is expected to be completed in December. This company is also constructing a 9,500-ton refrigerated carrier vessel named Takashima Maru, which is scheduled to be launched in mid-December. (Suisan Keizai Shimbun, September 8, 1961.)

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SOVIET FISHERIES MISSION COMMENTS
ON JAPANESE NORTH PACIFIC
HIGH-SEAS FISHING OPERATIONS:

In June and July 1961 an eight-man Soviet fisheries mission inspected Japanese high-seas fishing operations in the North Pacific and shore installations at Hokkaido, Japan. This mission was in exchange for an eight-man mission sent by Japan to Kamchatka and Sakhalin in June 1961.

The Soviet mission was divided into three groups: (1) mothership team, (2) Hokkaido team, and (3) research ship team.

The mothership team boarded the Japanese North Pacific salmon mothership Meisei-Maru.

The Hokkaido team visited fish markets, salmon canneries, shipyards, can and net manufacturing plants, a mink farm, research stations, and fish hatcheries.

The research team went aboard the Japanese research vessel Hokko-Maru, to observe experiments testing the fishing efficiency of gill nets having meshes of varying sizes.

The Soviet mission held several press conferences after completion of their scheduled trip commenting that (1) equipment on Japanese fishing vessels was very good but accommodations for the crews were very poor; (2) standards were high in can manufacturing and salmon canning but not as mechanized as in the U.S.S.R.; (3) canning techniques were good but Soviet canned salmon and mackerel are of better quality; (4) Soviet Union was releasing 2 billion young salmon in the next two years compared to Japan's planned schedule to release 800 million; (5) Japan must exert greater efforts in the field of salmon propagation for the protection of the salmon resources common to both countries; (6) additional experts should be added to the exchange missions; (7) Japan should expand its restricted fishing area because of poor spawning conditions and increased catches by the Japanese fishing fleets outside the restricted or regulated area of North Pacific Soviet-Japanese convention waters.

Six members of Japan's fisheries mission to U.S.S.R. inspected fishery operations in West Kamchatka and 2 men observed research work conducted on a Soviet survey vessel. (U. S. Embassy, Tokyo, August 9, 1961, despatch.)



Libya

FISHERIES TRENDS, AUGUST 1961:

The tuna fishing season in Tripolitania, which occurred during the second quarter of

Libya (Contd.):

1961, was reported a failure by reliable unofficial sources due to the non-appearance of any sizable schools of tuna for the first time in years. No large catches were reported, and coastal fishermen at the end of June were pulling in their nets. It appeared likely that the several tuna canneries on the Tripolitanian coast would have to buy fish, probably from the Japanese. Predatory fish, such as shark and dogfish, were thought to have driven the schools away.

The appearance of Greek sponge fishing boats in April signified the opening of the season in Tripolitania. Reportedly dissatisfied with high license fees in Tripolitania, they shifted their operations to Cyrenaica, but results of their operations were not known as of mid-August this year.

In addition to the German fisheries experts who visited Libya in the first quarter, a Nationalist Chinese expert was reported in Tripoli at the end of June. The Government was apparently welcoming advice regarding its earlier decisions (in January this year) to establish a Federal Fisheries Service. Finally a Ministry of National Economy order, published in June, established a temporary Fisheries Affairs Office under the Ministry. (United States Embassy, Tripoli, report of August 25, 1961.)



Mexico

EX-VESSEL SHRIMP PRICES
AS OF AUGUST 28, 1961:

On August 23, 1961, ex-vessel shrimp prices at Mexico's Gulf ports of Carmen and Campeche increased again. Due to prevailing high prices, it was reported that practically no shrimp were being peeled and deveined in that area. A further increase in ex-vessel prices took place on August 28 when prices increased 2 cents a pound for 36-40 count shrimp

Ex-Vessel Prices, Carmen-Campeche, All Species (Headless)

Count per Lb.	August 28	August 23	August 18	July 26
..... (U. S. Cents a Pound)				
U/15 ...	78	78	74	64
16/20 ..	72	72	68	57
21/25 ..	66	66	62	52
26/30 ..	60	60	57	47
31/35 ..	56	56	51	42
36/40 ..	50	48	45	37
41/50 ..	43	42	39	32
51/65 ..	36	36	34	27
66+ ..	18	18	20	15

and one cent a pound for 41-50 count shrimp. (United States Embassy in Mexico City, August 25 and 30, 1961.)

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IMPORT PERMIT REQUIRED
ON MANY FISHERY PRODUCTS:

Effective June 28, 1961, the Mexican list of products requiring a prior import permit includes many fishery products. Import control on fishery products applies also to entries into Mexican free zones and perimeters.

The fishery products listed are: Tariff Schedule Number and Product; 040.00.00, lobsters; 040.00.01, oysters in the shell; 040.00.98, shellfish and mollusks, not specified; 040.00.99, fish; 041.00.01, squid, frozen; 041.00.22, shrimp, fresh or chilled; 041.00.03, shrimp, frozen; 041.00.05, huachinango (porgy), frozen; 041.00.07, lobster, frozen; 041.00.10, salmon, fresh or chilled; 041.00.11, salmon, frozen; 041.00.12, sardines, fresh or chilled; 041.00.13, sardines, frozen; 041.00.98, fish, fresh, chilled, or frozen, not specified; 042.00.00, herring, smoked, cooked, salted, salt-pressed, or dried; 042.00.01, cod, smoked, cooked, salted, salt-pressed, or dried; 042.00.02, shrimp, smoked, cooked, salted; salt-pressed, or dried; 042.00.03, salmon smoked, cooked, salted, salt-pressed, or dried; 042.00.04, sardines, smoked, cooked, salted, salt-pressed, or dried; 042.00.96, food-stuffs, containing fish, crustaceans, shellfish, or mollusks, not hermetically packed, not specified; 042.00.97, crustaceans, shellfish or mollusks, smoked, cooked, salted, salt-pressed, or dried, not specified; 042.00.98, fish, cooked, salted, salt-pressed, or dried, not specified.

Mexico added the following to the above list, effective July 28: 892.09.05, fish nets of vegetable fibers; 892.09.06, fish nets of artificial or animal fibers or mixtures thereof. Effective July 29: 042.00.99, fish, smoked, not specified. (Foreign Commerce Weekly, August 14 and September 11, 1961.)



Netherlands

OYSTER INDUSTRY PLANS FOR SURVIVAL
WHEN PRODUCING AREA IS
CUT OFF FROM SEA:

To prevent a reoccurrence of the disastrous floods of January 31, 1953, in the southwestern part of the Netherlands, the Government established a special study commission,

Netherlands (Contd.):

the so-called Delta Commission, which advocates a considerable shortening of the Dutch coastline, especially in the south-western district. Such a procedure would not only make defense against the sea easier, but would also lead to the creation of huge bodies of fresh water, to be filled by the Rhine River.

The Dutch Parliament decided in principle to follow the advice of the Delta Commission. One of the estuaries to be cut off from the sea is the Oosterschelde, the artery of the Dutch oyster industry. Holland is the second oyster-producing country in Europe, but in mechanization and scientifically-guided control of predators, parasites, and diseases, it ranks among the first in the world.

Well over 30 million Dutch oysters were marketed in the 1960/61 season, and the town of Yerseke, with its large oyster storage basins and its important fleet (it is the third fishing port of the Netherlands) flourishes.

Though it will take some 15 years before the Oosterschelde is cut off from the sea, Zeeland oystermen are already faced with the problem of whether to advise their sons to choose this very specialized profession. The construction of the huge enclosure dam in the Oosterschelde will no doubt mean the end of Yerseke as a European oyster center, but will it also mean the definite and irrevocable loss of the Dutch oyster industry? Is it really impossible to grow oysters on a commercial scale in other areas on the Dutch coast, or to execute engineering works to make a well-chosen section suitable for a profitable cultivation of oysters?

The Minister of Agriculture and Fisheries ordered investigations aimed at perpetuation of the Dutch oyster industry. A field laboratory of the Netherlands Institute for Fishery Investigations was set up in Wemeldinge; the work began there in 1955, efforts being made to rear oyster larvae indoors.

It can now be concluded from these investigations that growth and fattening of oysters is possible under conditions differing considerably from those prevailing in the oyster district of the Oosterschelde. When an appropriate technique can be developed, oysters can be grown on sandy bottom at low current velocities. The phytoplankton content of several water masses is high enough

for the growth and fattening of oysters, but it may be necessary to eliminate the excess of sand and silt before the water can be used in an oyster culture project. Rearing of oyster larvae and artificial production of oyster spat is certainly possible, should natural reproduction fail in a man-made oyster area. The rearing procedure is, however, not yet fool-proof; though ways to improve it have been found.

It has now been decided to construct an artificial oyster-rearing area to continue the experimental work and to develop new techniques of oyster cultivation. This project will be constructed behind the recently-completed enclosure dam north of the city of Veere, in stagnant but saline water, close to the open North Sea. It will consist of a large, rather shallow basin which can take up fresh supplies of sea water at high tide. After the sedimentation of excess sand and silt, this water will be led in wide channels to the area where the oysters are kept. Since current velocities will differ from section to section of the channels the best conditions for growth and fattening can be found after a few years of experimentation. Frequent analysis of the water in settling basin and rearing channels will make it possible to study the factors conducive to oyster culture.

The oystermen from Yerseke will be confronted with this work at frequent intervals, and their practical advice will be very welcome indeed. Thus science and the industry will try to find out together how to grow oysters in a man-made area. The experience gained over several years will be used to decide when such a new technique can be fool-proof and profitable enough to warrant the investment required for oyster culture on a scale comparable with the present. (World Fishing, September 1961.)



Norway

FISHERMEN AND THE COMMON MARKET:

The Norwegian Government should not consider that Norwegian fishermen, as a matter of course, will agree to foreign fishermen generally being permitted to fish within Norwegian fishing limits, according to press reports of a statement made by the head of Norway's Fishery Association at the national meeting in Trondhjem on August 21, 1961.

Norway (Contd.):

He said that the fishermen must understand clearly what it will cost to join or not join the Common Market. (As reported by the Fisheries Attache, United States Embassy, Copenhagen, on August 25, 1961.)

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FISH MEAL INDUSTRY FACES CRISIS:

The crisis in Norway's fish meal and oil industry has now been reported on by a committee set up to deal with the matter. The crisis resulted from the combined effects of the failure, since 1957, of the traditional winter herring fishery and the drop in world market prices for meal and oil since 1959. The amount of winter herring bought by the reduction plants has dwindled from a maximum 911,400 metric tons in 1956 to a mere 7,440 tons this year, less than would normally be taken by the plants for just one day's operation at full capacity.

This development has completely changed the economic status of the Norwegian meal and oil industry. The fishermen have, of course, been seriously affected, but they can at least turn to other fishing with Government subsidies.

There are 76 meal and oil plants in Norway, with a daily handling capacity of 47,917 tons. The price crisis has affected all the plants, but the 53 in Western Norway (from Egersund to Kristiansund) which rely almost exclusively on the winter season for raw material have been extremely hard hit.

Since World War II, the Norwegian meal and oil industry has become of major importance, and has made use of more than 50 percent of the total Norwegian fishery catch. Herring provides the main source of supply, and since the war the reduction plants have taken 76 percent of all landed winter herring and 85 percent of all fat and small herring. From 1953 through 1957 Norway accounted for 16.9 percent of the world's production of fish meal. This shrunk to 8.3 percent in 1958, and 7.2 percent in 1959. The industry also provided a valuable export trade for the country; during 1953-57, the Norwegian share of the world export of fish meal averaged 35 percent. It fell to 17.3 percent in 1958 and to 11.6 percent in 1959.

The Norwegian Government is at present trying to build up the industry with marketing guarantees to the meal and oil manufacturing companies, and with price subsidies to the fishermen. This has led to increased fishing for North Sea fish (North Sea herring, sand eels, and Norway pout) by trawlers, and the establishment of industrial purse-seine fishing for Icelandic herring. This led to an increase in raw fish for the Western Norway plants at least.

In North Norway, the subsidies have encouraged fishermen to concentrate far more on the capelin and fat and small herring fishery. Over 186,000 tons of capelin were landed this past spring--double the landings for the same period of 1960. With these supplies together with those of fat and small herring which have poured into the bins of the plants since late autumn 1960, the North Norway plants have been able to operate continuously for between 8 and 9 months, with no time for even a checkup of the machinery. The fishermen feel that the present capacity of the North Norway plants is insufficient and slows down landing possibilities. They have thus put forward strong demands for the building of new plants, especially in Finnmark.

The committee's recommendations have not been too well received. The committee suggested that the capacity of plants should be cut by scrapping (or "organized condemnation") of machinery, while other plants should be "laid up" until the present position improves. (World Fishing, September 1961.)

* * * * *

HERRING CATCHES IN AUGUST REPORTED GOOD IN LOFOTEN AREA:

For the first time in many years, waters off North Norway's Lofoten islands were teeming with fat herring. As of August 29, fishermen had landed about 90,000 hectoliters (8,370 metric tons) which had a first-hand value of about Kr. 2.7 million (US\$378,000). Herring runs of similar size have occurred in Lofoten only four times before in this century. According to experts, the influx is likely to continue for many months.



On the herring fishing grounds off the west coast of Norway. Photo shows about 180 tons of herring concentrated in the bag section of a large purse seine which has been tied up to the fishing vessel. Fish are now ready for brailing on board the vessel.

Norwegian participation in the Iceland summer herring fishery produced very good results. During July and August, about 80-90 Norwegian fishing vessels brought home about 1,000,000 hectoliters (93,000 tons) of Iceland herring. This was processed into 20,000 tons of herring meal. The more than 1,200 vessels which took part in last winter's herring fishery off West Norway landed only about 60,000-70,000 hectoliters (5,580-6,510 tons)

Norway (Contd.):

at coastal processing plants. (News of Norway, September 7, 1961.)

* * * * *

PRODUCTION OF MARINE OILS EXPECTED TO REMAIN LOW:

Winter herring fishing off Norway's west coast is nearing the end of a cycle that may be followed by a complete absence of the fish in the area during the next 10 or 20 years, according to Norwegian experts.

It is believed that the fish population tends to shift periodically to other areas, depending on ocean currents, water temperatures, and other factors.

The 1961 winter herring season ended largely in failure, with landings of only 74,000 short tons, the smallest in 50 years and much below the 1954-60 average of 800,000 tons.

This year's small herring catch has dealt a serious blow to fishermen and reduction plants, which produce fish oil and meal. For years, Norway's domestic edible oil requirements have been met largely by the winter herring catch. Also, exports of hardened marine oils have been produced largely from the herring catch.

Norway's declining domestic production of marine oils is attributable to smaller catches of winter herring and Antarctic whales. As a result, imports of fish oil have been increased in recent years to meet requirements for domestic edible oil and export commitments for hardened marine oil.

In 1960, Norway's import requirements for marine oil were largely met with 45,000 tons of raw herring oil from Iceland. This year, the United States may be the major supplier of marine oils to Norway. In the first half of 1961, fish oil exports from the United States to Norway totaled 15,640 tons, or double those of 1960. (Foreign Crops and Markets, U. S. Department of Agriculture, September 4, 1961.)

* * * * *

REGULATIONS ISSUED FOR FISHING ZONE EXTENSION:

Regulations covering the extension of Norway's fishing limits zone from 6 to 12 nauti-

cal miles, effective September 1, 1961, have been announced by the Norwegian Government. The extension applies to waters west and north of Lindesnes. On April 1, 1961, the Norwegian fishing limits zone was extended from 4 to 6 nautical miles.

A newspaper report of a ministerial meeting in Oslo August 19, 1961, stated that in connection with the expansion of the Norwegian fishing limits to 12 nautical miles on September 1, it had been decided to permit Swedish, Danish, and Faroese fishing vessels to fish until further notice in the area beyond 6 nautical miles from land from the southern tip of Norway northward and westward.

The new Norwegian fishing limits, which became effective September 1, set the new boundary at 12 nautical miles from the coast from Cape Lindesnaes toward the west and north. There are no changes east of the Cape where the Danish fishermen will have the same rights they have always had, according to newspaper reports of August 23. West of Cape Lindesnaes, according to Danish-Norwegian agreements, Danish fishermen may fish up to 6 nautical miles from the coast, despite the new fishing limits. This fishery, however, is subject to Norwegian fishery legislation and jurisdiction.

In anticipation of the new fishing limits, the Norwegian Government reached a number of important decisions in this connection, according to newspaper reports on August 19. Norwegian fishing vessels may use trawls in the area between 6 and 12 miles from the coast. In certain areas and at certain times it is forbidden to fish with other gear than lines, hand lines, or nets within 4 nautical miles of the coast.

In accordance with the Norwegian-British agreement of November 17, 1960, British fishing vessels may fish in the 6- to 12-mile belt until October 31, 1970, under the same conditions as Norwegian fishing craft.

The Soviet Union has asked to negotiate with Norway in regard to the latter's 12-mile fishing limits which will become effective September 1, according to the Oslo correspondent of Copenhagen's Berlingske Tidende of August 13. No dates have been set for the negotiations, but the Foreign Ministry has presented certain questions to the Soviet Foreign Ministry in order to clarify the area of the negotiations. The correspondent con-

Norway (Contd.):

cludes the Russians will want the same rights as the British to fish up to the six-mile limit. Since the Russians, themselves, maintain a 12-mile boundary, it seems reasonable to believe that the Norwegian authorities will demand the same rights for Norwegian fishermen to fish within the 12-mile boundary as the Russians eventually obtain in Norwegian territory. To guard the 12-mile zone against violations, the Norwegian Navy will have six armed craft, with a complement of 132 men, at its disposal. These have been leased by the Navy, until new patrol vessels now under construction are ready for service. (August 25, 1961, report from the Fisheries Attache, United States Embassy, Copenhagen, and News of Norway, August 24, 1961.)



Pakistan

SHRIMP FISHERIES OF EAST PAKISTAN:

Due to the scattered nature of the shrimp industry in East Pakistan, it is rather difficult to give reasonably accurate statistics of production. In addition to the shrimp caught by commercial fishermen, a considerable quantity is caught and consumed by agriculturists and others.

Types of Shrimp: A total of 22 species of shrimp have been recorded from the East Pakistan waters. Bagda chingri (Penaeus semisulcatus) is the biggest salt-water type of East Pakistan, which sometimes attains a length well over a foot. It is abundantly available in Khulna Sundarbans. Chapda chingri (P. indicus), though smaller than bagda chingri in size, constitutes the biggest commercial catch of the province. Throughout the year, this species is caught and quantities are collected from the Sundarban area.

The most important fresh-water shrimp is Golda chingri or Mocha chingri (Pataemon carcmus). This species is very common in the lower reaches of the rivers, lakes, beels, paddy fields, and tanks. They grow up to one foot in length.

Honye chingri, (Metapenaeus monoceros), Ghusha chingri (Leander sp.), shul chingri (Pataemon birmanicus birmanicus) are the other important species of shrimp fished in East Pakistan waters.

Some species of shrimp are available throughout the year while others are caught during certain months only. Several species of Pataemon are collected in huge quantities from fresh-water fisheries after the monsoon when the water level falls. In Khulna Sundarbans and Bakarganj, where maximum quantities of shrimp are caught, fishing goes on through out the year.

Methods of Fishing: Various types of nets and traps are used for the capture of shrimp. Berjal, moijal (drag and seine nets), chantijal (trawl net), behuti or behundi jal (fixed purse net), Charpata jal (stake nets), vesal jal, Honcha jal (framed or dip nets), and kepla jal (cast net) are generally used. Behundi jal is extensively used in the estuarine areas and are very effective. More shrimp are caught by these nets than all other types of nets and traps taken together.

Honcha, dhak, hogra, kholson, etc. (various types of split bamboo traps) also are used for shrimp.

Culture: Shrimp are regularly cultured in bheries (salt-water fisheries) of Khulna and to some extent in the khals (channels) of Bakarganj and Chittagong.

The young shrimp enter the bheries along with other species of fish during the months of January to April. After growth and fattening, these are marketed from June onwards. No special cultural practices are followed for rearing shrimp in the bheries. Bagda chingri forms the most important species in such impoundments.

Occasionally villagers stock their ponds with young Golda chingri. Shrimp are of great economic importance. So the attention of the Directorate of Fisheries is directed to explore the possibilities of rearing commercially-important species of fresh-water shrimp in ponds. Research is being conducted in the laboratory of the Directorate to work out a method for successful culture of shrimp in ponds. Feeding habit, breeding habit, growth rate, etc. of different species are being studied and results so far obtained are promising.

Preservation: During the season a huge quantity of shrimp is caught, a considerable part of which, due to lack of transport and preservation facilities, cannot be marketed fresh. So a good percentage of the catch is either sun-dried, boiled and sun-dried, or smoked in the crudest possible method.

Pakistan (Contd.):

In sun-drying, the shrimp are simply spread out in mats, in bamboo trays, or on raised split bamboo platforms. After hard drying these are removed and shelled by beating. The finished product is stored in gunny bags while the shells are sold as fertilizer.

In a second method, the shrimp are boiled for a few minutes in fresh water containing a small quantity of common salt. As soon as the shells become soft, the water is drained out and the shrimp are spread out for sun-drying.

Shrimp are smoked by placing them on raised platforms, and then applying hardwood smoke from below. No wood containing much resin and oils is used for the purpose. An improved method of shrimp curing devised at the Fisheries Experimental Station, Tanur (Madras), can be adopted in East Pakistan with advantage. This method consists of boiling fresh shrimp in 6 percent brine for 2 minutes. As soon as the shrimp begin to float, they are removed, shelled, and placed in vats containing a saturated salt solution for 15-30 minutes. After brining, the shrimp are gently squeezed and spread on trays and either dried in the sun or in an artificial drier during inclement weather. The resulting product keeps for days. This product can be easily transported to distant places packed in butter paper and small bamboo baskets. The "semi-dried prawns"--as the product is known--are freshened by soaking them in warm water for a few minutes.

The semidried shrimp can be kept 8-12 months in sealed tins containing carbon dioxide gas. Plants can be established in important shrimp-catching areas for the preparation of semidried shrimp.

In Tanur Fisheries Station (Madras), a process for shelling shrimp has been evolved. This process consists of boiling fresh shrimp in 5 percent brine, shelling them, washing the meat in 10 percent brine, and packing the product in airtight glass jars.

Quick-frozen fresh shrimp are in demand in foreign countries, particularly in the United States. A plant has been established at Bajua (Khulna) for freezing shrimp for export

to the United States. (Pakistan Observer Sunday Supplement, August 6, 1961.)

Note: Also see Commercial Fisheries Review, March 1961 p. 77.



Poland

FISHING FLEET AND LANDINGS UP SHARPLY BETWEEN 1949 AND 1960:

Poland's fleet of sea fishing vessels of only 302 craft (made up mostly of small inshore boats) had by 1960 grown to 657 vessels. The gross registered tonnage of the fleet in the same period increased from 15,200 to 71,400 tons. During the period, the fleet of cutters

Table 1 - Poland's Fleet of Fishing Vessels, 1949, 1955, and 1959-60

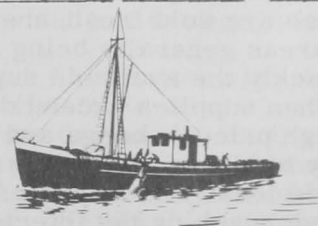
Type of Vessel	1960	1959	1955	1949
. . . (Number of Vessels) . . .				
Super trawlers	1/54	39	8	-
Trawlers	13	15	20	20
Luggers and trawlers . . .	50	50	34	-
Luggers	3	3	3	3
Cutters	537	502	397	279
Total	1/657	609	462	302
Total Gross Register Tons	1/71,400	58,100	34,300	15,200
1/Includes one factory trawler of 2,600 gross registered tons.				

almost doubled and the fleet of supertrawlers increased from zero to 53 vessels. In 1960 the fleet of supertrawlers included one factory trawler of 2,600 tons (GRT).

Table 2 - Poland's Marine Landings of Fishery Products, 1949, 1955, and 1959-60

Fishery	1960	1959	1955	1949
. . . (Metric Tons)				
Groundfish	51,000	36,700	40,300	36,900
Herring	93,500	84,700	52,000	12,000
Sprats	10,000	15,300	5,100	1,100
Other	13,200	9,300	9,700	9,300
Total	167,700	146,000	107,100	59,300

The sharp increase in the fishing fleet increased marine landings by 182.8 percent, from 59,300 metric tons in 1949 to 167,700 tons in 1960. The landings of herring, which apparently are the chief objective of the supertrawlers, rose almost sevenfold between 1949 and 1960. (Concise Statistical Yearbook of the Polish People's Republic, 1961.)



Sierra Leone

FISHING INDUSTRY CONTINUES TO GROW:

The development of Sierra Leone's inshore fishing industry has made some good progress in the past 15 years although the supply of locally-caught fish has not kept pace with demand, which has increased greatly with rising living standards (imports of fish products were valued at about US\$1,042,000 in 1960). About 25,000 metric tons of fish (primarily bonga and mullet, but including also skate, shark, ladyfish, whiting, gwangwa, sheephead, crocus, snapper, catfish, and sole) were landed in 1960, a marked increase over the estimated landings of about 5,000 tons in 1945. The bulk of the catch was brought in by unpowered bonga canoes, 3,000-3,500 of which now operate in Sierra Leone waters as compared with only 300 in the immediate postwar period. Techniques are largely primitive, with cast nets from the canoes and also some beach seines and hand lines in use.

A small portion of the catch (estimated at 2,000 and 3,000 tons) was landed by about 10 African and European-owned motor trawlers which have been operating off the coast in recent years. Inshore fishing is protected by a law prohibiting these larger vessels from operating in the estuaries or within one mile of the coast. Outside this area the trawling grounds are restricted to inshore waters rarely deeper than 20 fathoms due to the existence of a permanent thermocline at this depth below which there is a sudden drop in the catch. While the trawling grounds are probably not yet fully exploited, there is a danger that the increased introduction of powered vessels might result in overfishing. This situation is aggravated by the fishing of large numbers of foreigners, particularly Fantis from Ghana, off the Sierra Leone coast.

The indigenous fishing industry is largely controlled by local traders (almost invariably women) who provide the capital needed for the purchase of fishing gear and are repaid in kind from the catches which they market. Most fish are sold fresh, the demand in the coastal areas generally being sufficient to absorb quickly the available supplies. Occasionally when supplies exceed demand (at relatively high prices), bonga and mullet are preserved by smoking and drying and subsequently sold locally or inland. The amount of marine fish reaching the interior in this

manner, however, is probably quite limited. While there are no records of landings, inland rivers and lakes are fished and likely yield a useful seasonal catch, although this source also falls considerably short of the needs of the interior peoples.

The Government is attempting to foster the growth of inshore fishing by encouraging the increased use of modern techniques and improvements in credit and marketing facilities. The Fisheries Development Research Unit, in addition to its scientific activities, operates a loan scheme to enable local fishermen to purchase small trawlers and modern gear. Fishing cooperatives are being encouraged and there are now seven such societies. The Government is also considering various other measures to assist the fishing industry, including establishment of a vessel-building yard, construction of low-cost jetties, establishment of an outboard motor repair shop, and the improvement of cold-storage and ice-making facilities.

It is in offshore fishing that the greatest possibilities for growth would appear to lie. In recent years tuna schools have been found 70-80 miles off the Sierra Leone coast and Freetown is now the second largest tuna receiving port in West Africa. Recently a significant expansion of the tuna industry has occurred, mainly through the efforts of a United States fish canning company working in conjunction with a locally-operated cold-storage warehouse. In 1960, 2,340 tons of tuna were landed, while in the first five months of 1961 landings totaled 2,768 tons. None of the catch is as yet marketed locally, but it is held in cold storage and later shipped to Puerto Rico for canning. Expansion of cold-storage facilities is under way and construction of a canning factory is a future possibility. (United States Embassy, Freetown, August 14, 1961.)



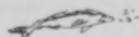
Somali Republic

FISHERY TRENDS, AUGUST 1961:

The fish resources of the Gulf of Aden (that borders on part of Somali) are believed to be considerable and the primary exploitation to date has not been in the regions of the northern area. But in the adjoining Migiurtina region at Candala there is an Italian tuna-canning plant which has been in operation for many years.

Somali Republic (Contd.):

Italian financial circles have recently displayed an interest in initiating larger-scale investment in the fishing industry which contemplates buying up large quantities of tuna and shark on the northern Somali coast, and shipping them out of the port of Berbera for canning and processing into bone meal in Italy. The plan envisages furnishing local fishermen with long lines and other equipment. (United States Embassy in Mogadiscio, August 29, 1961.)



South Africa Republic

CANNED ABALONE PRODUCTION,
JANUARY-JUNE 1961:

In the first six months of 1961, four South African firms produced a total of 249,723 pounds of canned abalone. The pack consisted of 12,191 pounds in cases of 48 1-lb. cans, 179,932 pounds in cases of 48 14-oz. cans, and 57,600 pounds in cases of 48 ½-lb. cans.

According to the South Africa Republic's Division of Fisheries, no abalone are canned in South-West Africa. (United States Consulate in Cape Town, August 24, 1961.)

PILCHARD-MAASBANKER FISHERY
INDUSTRY, JANUARY-MAY 1961:

The Union of South Africa Cape west coast pelagic shoal fishery catch for the first five months of the 1961 season consisted of pilchards 343,815 short tons, maasbanker 29,911 tons, and mackerel 45,716 tons. The total catch was 419,422 tons. In 1960 the catch for the same period was pilchards 211,525 tons, maasbanker 43,143 tons, and mackerel 28,273 tons; a grand total of 282,941 tons. In 1959 the total catch for the first five months was 197,125 tons.

The May catch was pilchards 60,205 tons, maasbanker 14,362 tons; and mackerel 1,986 tons; a grand total of 76,553 tons. In May 1960 the catch was pilchards 46,396 tons, maasbanker 2,422 tons, and mackerel 341 tons; a grand total of 49,159 tons.

The May catch this year yielded: fish meal 17,601 tons, fish body oil 1,499,880 Imperial gallons, canned pilchards 709,824

pounds, canned maasbanker 2,759,568 pounds, and canned mackerel 493,680 pounds.

South Africa Republic--Products Produced from Pilchard-Maasbanker Fishery Landings, January-May 1961				
Fish Meal	Fish Oil	Canned		
		Pilchards	Maasbanker	Mackerel
Short Tons	1,000 Imp. Gals.	(1,000 Lbs.)		
88,861	7,999	17,299	6,756	13,766

During May 1961 the Walvis Bay shoal fishing industry of South-West Africa caught: pilchards 70,946 tons, and maasbanker 14 tons. The total Walvis Bay catch to the end of May was: pilchards 127,970 tons, and maasbanker 14 tons. (From The South African Shipping News and Fishing Industry Review, July 1961.)



Sweden

FISHERIES ASSOCIATIONS DISCUSS
HERRING LANDINGS IN WEST GERMANY:

Representatives of the West German trawling and canning industries met in Goteborg, Sweden, to discuss the Swedish direct landings of herring in West Germany with representatives of West Coast Fishermen's Central Association, the West Coast Fishermen's Fish Processing, and West Coast Fish. The meeting in September 1961 was arranged inasmuch as the West German trawler companies insisted that Swedish fishermen either limit their direct landings of herring in West German ports or, if this was not possible, stop the landings.

As a result of the negotiations a minimum price of DM 16 (US\$4.00) per box was set for herring landed in West German ports. For herring which cannot be sold at a price of DM 16 per box, and which will be taken over by the reduction plants, the Central Association guaranteed Swedish fishermen a price of at least DM 10 (\$2.50) per box.

The agreement was effective immediately and is valid through the end of 1961, at which time it will be subject to renegotiation.

The Central Association also decided to limit the Swedish fishermen's landings of herring in West German ports from 140 boxes per fisherman each week to 120 boxes per man each week. This restriction is valid until further notice. (United States Consulate, Goteborg, September 18, 1961.)

Sweden (Contd.):

NEW STEEL TRAWLERS BUILT IN EAST GERMANY DELIVERED:

The first two steel trawlers in the series on order from an East German shipyard have been delivered to two owners on the Swedish west coast.

The trawlers have a length of 105 feet, a beam of 22 feet, and are equipped with 560 hp. Diesel engines giving the trawlers a speed of 10 knots. The loading capacity is 1,500 boxes. The trawlers are equipped with echo-sounding devices and radiotelephone. The cost of each vessel was about 600,000 crowns (about US\$115,800).

A representative of the Swedish firm that imported the steel trawlers, stated that the first series on order with the East German shipyard numbers 11 trawlers. A second series of 4 trawlers has also been placed with the same yard. The latter trawlers will be equipped with a more powerful engine of Swedish manufacture. (United States Consulate, Goteborg, September 18, 1961.)



Thailand

INDUSTRIAL INVESTMENT PROMOTION ACT INCLUDES FISHERIES AND RELATED INDUSTRIES:

The Industrial Investment Promotion Act of Thailand, designed as a revision of previous laws, decrees, and announcements relating to the promotion of industrial investment (including private foreign investment), came into force on October 25, 1960, when published in the Government Gazette. Fisheries and related industries are included.

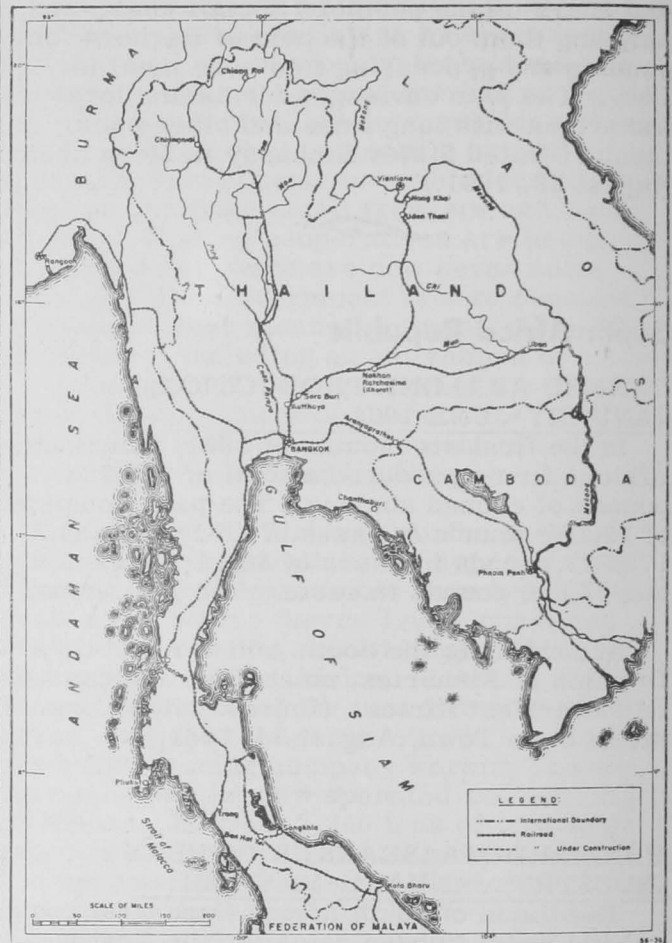
Supplanting the International Promotion Act of 1954 and various subsequent announcements, the act is significant in the following two respects.

(1) The number of industries eligible for benefits has been substantially increased.

(2) Thailand's industrial promotion inducements are now no longer based on mere "announcements" but on actual legislation; hence, investor confidence is expected to grow.

Among industries eligible for rights and benefits under the act are:

Fishing net or seine production (minimum annual capacity, 30,000 kilograms or about 66,000 pounds).



Food canning, including food packaging in other airtight containers (local raw materials must be mainly used. Minimum annual capacity, 500 metric tons of quality canned or otherwise airtight-packaged food).

Pearl oyster breeding (process must include all phases up to and including the pearl and pearl-by-product yielding stage. Minimum investment is \$100,000).

Deep-sea fishing (minimum capacity, plant(s) ashore to process the catch of craft of at least 30 gross tons, operating in waters of a depth of at least 30 meters or about 16 fathoms. Applications to cover both shore and offshore operations as a package project).

Turkey

CONFERENCE ON FISHERIES:

A conference on the Turkish Fishing Industry arranged jointly by the Turkish Ministry of Commerce and the State Hydraulics Department was held in Ankara, August 9-12, 1961. The Minister of Commerce, who gave the opening speech, after a short history of the fishing industry in Turkey, emphasized the importance of the industry to the Turkish economy and added that the Turkish Government has decided to extend credits without interest to persons engaged in the fishing business. The Government has also decided, according to the Minister, to reduce the cost of fishing gear sold in Turkey. Another official at the Conference confirmed those statements and added that the Fisheries Administration must be better organized.

A report previously prepared by the Ministry of Commerce on the Fishing Industry in Turkey was discussed and members of the industry voiced their needs and wishes. Subjects under discussion included: (1) necessary measures for the development of the fishing industry; (2) production and storage of fish; and (3) marketing problems. A decision was taken to prepare a report on the Turkish Fishing Industry for submission to the State Planning Agency.

Fisheries received attention in the recently published seventeen-point statement on Agricultural Policy made by the Republican People's Party. It was recommended that fish production be better organized and domestic production be increased. (United States Embassy, Ankara, September 1, 1961.)



United Kingdom

FISHERY LOANS INTEREST RATES REVISED:

The British White Fish Authority in August 1961 announced that their rates of interest on advances made as from August 5, are as follows:

Fishing vessels of not more than 140 feet, new engines, nets, and gear:

On loans for not more than 5 years-- $7\frac{1}{8}$ percent; increase 1 percent.

On loans for more than 5 years but not more than 10 years--7 percent; increase $\frac{5}{8}$ percent.

On loans for more than 10 years but not more than 15 years-- $7\frac{1}{8}$ percent; increase $\frac{1}{4}$ percent.

On loans for more than 15 years but not more than 20 years-- $7\frac{1}{4}$ percent; increase $\frac{3}{8}$ percent.

Processing plants:

On loans for not more than 15 years-- $8\frac{1}{4}$ percent; increase $1\frac{1}{8}$ percent.

On loans for more than 15 years but not more than 20 years-- $7\frac{3}{4}$ percent; increase $\frac{1}{2}$ percent.

The rates on advances made before August 5 are unchanged. (Fish Trades Gazette, August 19, 1961.)

Note: Also see Commercial Fisheries Review, September 1961 p. 106; January 1961 p. 84.

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TRAWLERS EXPERIMENT WITH TRANSFER OF CATCHES AT SEA TO CARRIER VESSEL:

A five-trawler express fishing venture--aimed at getting fresh fish back to port more quickly--was launched from Grimsby, England, on August 22, 1961, on a purely experimental basis. The skippers of five distant-water trawlers owned by a large British fishing company (and part of an associated fisheries group at Grimsby) sailed with the single operation order: "Fill the first one and get her back from sea."

The "fresher fish" fleet was composed of four catchers and one carrier, and the catchers had slight modifications to enable them to transfer their catches to the carrier.

The carrier in the operation was the Northern Sky. The four trawlers were: Northern Foam, Northern Prince, Isernia, and Serron.

The purpose of the experiment was to transfer the first part of the catches by the trawlers to the Northern Sky so that a larger quantity of first-class fish can be sent back to port immediately. The remaining four vessels resumed trawling in the normal way to

United Kingdom (Contd.):

fill their holds and returned to port later to keep the supply pipeline full. The Northern Sky is estimated to be able to carry about 560,000 pounds of fish.

A spokesman for the company owning the trawlers said: "We are carrying out this experiment to see if it is feasible to transfer fish at sea. If we prove that it is technically possible, it will have a great significance for the factory-type of vessel."

The experiment by five British trawlers in transferring catches at sea has been considered a success. The trawler Northern Sky, which served as a carrier for four other trawlers, returned to Grimsby, England, on September 4, 1961.

After the four trawlers had made a catch, the fish were gutted and transferred to the Northern Sky, the carrier, which immediately started for home. Fishing took place off Iceland.

The Northern Sky was back in port after 14 days, thus clipping five days off the usual trip since the shortest voyage from Iceland of any vessel arriving at Grimsby that day was 19 days.

The catch was also better than average, being a big combined one of excellent quality--419,860 pounds which sold for £9,326 (US\$26,112). The other four trawlers continued operations in the normal way after the Northern Sky left.

During the first five days of actual fishing, trawlers transferred their catches in winds of up to 40 miles per hour, and at one stage the transfer was done in dense fog, an operation that took 12 hours.

The fish was actually transferred in a manner similar to a ship refueling at sea. The catcher and the carrier steered on parallel courses and the catch was transferred by passing a line shackled into the closed cod-end net from the catcher to the carrier, which then winched it aboard. The fish was transferred to the carrier as soon as it was gutted.

Despite the adverse weather encountered, the managing director of the trawling firm said:

"The quality of the fish is excellent, and we feel we have learned a tremendous amount about transferring fish at sea. From this point of view it has been a very successful experiment indeed. Had it not been for the particularly slack fishing at the grounds, we do not think there would have been any difficulties in transferring a bigger catch. We now know that it is a feasible proposition to do so."

Stating that no further trips were planned in the immediate future, he went on: "We shall wait and see how we assess the commercial possibilities of the venture."

This is one of two major experiments by an associated group of British fishing firms, involving £1 million (US\$2.8 million) worth of trawlers, to get fresher fish to the housewife.

The other was the building of the part-refrigerated trawler Lord Nelson, twice the size of any other trawler, which landed at Grimsby the week of August 29 after her maiden voyage with a 612,360-pound catch, over half of which had been fresh-frozen at sea. (The Fishing News, August 25 and September 8, 1961.)