

**International**

**INTERNATIONAL NORTHWEST  
PACIFIC FISHERIES COMMISSION**

**SIXTH ANNUAL MEETING:**

The Sixth Annual Meeting of the Northwest Pacific Fisheries Commission (Japan-U.S.S.R.) convened in Moscow on February 26, 1962, to adopt regulations and set a salmon catch quota for Japan for the 1962 fishing season.

The Science and Technology Committee of the Commission met in Moscow prior to the main meeting. The purpose of holding the preliminary talks is to shorten the period of negotiations by the Commission. Four main topics were discussed: (1) methods used in estimating the condition of the salmon resources; (2) expected salmon runs in 1962; (3) exchange of scientists and experts for joint surveys in 1962; and (4) success of the joint surveys in 1961.

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**RUSSIAN AND JAPANESE PACIFIC  
SALMON CATCH, 1961:**

The Japanese Fisheries Agency released on December 19, 1961, the Russian and Japanese 1961 Pacific salmon catch data, which were exchanged between the two countries at

the meeting of the Science and Technology Committee of the International Northwest Pacific Fisheries Commission now in progress in Moscow. The Soviet catch totaled 79,738 metric tons and the Japanese catch, 145,664 tons.



Pulling in a gill net aboard a Japanese vessel in the North Pacific and removing the salmon from the net.

Table 1 - Russian Catch of Pacific Salmon by Area and by Species, 1961						
Area	Species of Salmon					
	Red	Chum	Pink	Silver	King	Total
	.....(Centners 1/).....					
East Kamchatka ..	10,203	43,975	136,580	23,494	5,842	220,094
West Kamchatka ..	67,731	29,431	44,322	21,078	699	163,261
Sakhalin-Kurile Islands .....	-	14,452	71,840	-	-	86,292
Northern Okhotsk ..	-	19,847	34,514	301	-	54,662
Okhotsk Region ..	405	130,539	7,184	323	-	138,451
Amur .....	-	126,281	2,274	-	-	128,555
Maritime Province	-	-	6,061	-	-	6,061
<b>Total .....</b>	<b>78,339</b>	<b>364,525</b>	<b>302,775</b>	<b>45,196</b>	<b>6,541</b>	<b>797,376</b>
1/One centner equals 100 kilograms or about 220 pounds.						

Press reports concerning the progress of the Technical Committee meeting indicate that Japan and the Soviet Union have reached an agreement over the method of evaluating resources but have not been able to agree on the



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Table 2 - Japanese Catch of Pacific Salmon by Fishery and by Species, 1961

Fishery	Species of Salmon					
	Red	Chum	Pink	Silver	King	Total
	..... (Metric Tons.) .....					
Mothership ...	34,901	13,013	4,908	647	105	53,574
Gillnet 1/....	1,798	13,118	49,316	3,632	362	3/68,226
Longline 2/...	39	2,723	11,155	7	39	13,963
Coastal trāp ..	-	257	9,644	-	-	4/9,901
<b>Total .....</b>	<b>36,738</b>	<b>29,111</b>	<b>75,023</b>	<b>4,286</b>	<b>506</b>	<b>145,664</b>

1/Land-based fishery conducted south of 48° N. latitude and east of Kurile Islands and Eastern Hokkaido. That part of this fishery between 48° N. and 45° N. governed by Russian-Japanese Fisheries Treaty.

2/Land-based fishery conducted south of 45° N. latitude off Eastern Hokkaido. This fishery wholly outside of Russian-Japanese Fisheries Treaty waters.

3/Figures include 11,355 metric tons of salmon taken in Russian-Japanese Fisheries Treaty waters (between 48° and 45° N. latitude).

4/Figures include catch for period of January-July 1961.

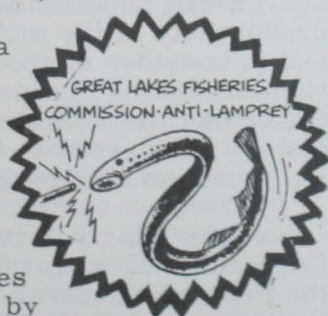
interpretation of data. The Soviet Union claims that the Japanese high-seas fishing has caused an unprecedented decline in the abundance of salmon stocks, a claim strongly refuted by Japan. Japan is taking the position that it is undeniable that the abundance of pink salmon, for example, has declined in recent years, but it is not altogether possible to say on the basis of available data that the 1961 pink salmon run was any worse than the parent run in 1959, and asserts that natural mortality must also be taken into account in evaluating the status of the salmon resources. (Nippon Suisan Shimbum, December 20; Suisan Tsushin, December 19, 1961.)

Note: See Commercial Fisheries Review, April 1961 p. 46.

INTERNATIONAL GREAT LAKES FISHERIES COMMISSION

INTERIM MEETING OF COMMISSION:

An interim meeting of the International Great Lakes Fishery Commission was held in London, Ontario, November 29-30, 1961. Reports on the progress of the sea lamprey control program were made and they presented a much more optimistic picture than in previous reports. Evidence based upon recent scarring of Great Lakes trout and lake herring by lamprey indicates that the lamprey population has been reduced substantially. The true de-



cline in lamprey abundance cannot be accurately predicted on the basis of these preliminary data and will not be available until July 1962. Nevertheless, these preliminary data are very encouraging and, on the basis of these findings, the Commission recommended to the States the elimination of all fishing for lake trout, except that necessary for proper biological sampling of the lake trout populations. Thus, for the first time the Commission has publicly recognized evidence of lamprey control and is recommending regulations which will enhance the trout rehabilitation program.

The second objective of the Convention, which is to recommend to the States long-range programs to achieve coordinated conservation and utilization of the fisheries resources of the Great Lakes, is also being studied by the Commission. Eastern States bordering Lakes Erie and Ontario have felt that a disproportionate share of the attention of the Commission has been placed on sea lamprey control. The action which emphasizes the establishment of scientific committees on each lake to study long-range programs has brought much favorable comment from advisers of the Eastern States.

In general, the meeting was perhaps the most significant held yet by the Commission and the results reported were the most encouraging.

FOOD AND AGRICULTURE ORGANIZATION

ELEVENTH SESSION OF CONFERENCE:

The Food and Agriculture Organization of the United Nations held its Eleventh Conference in Rome, Italy, from October 20 to November 23. This Conference is held once every two years to enable member countries of FAO to review past programs, determine the program of work and the budget for the coming two years, and to consider long-range programs. Programs were discussed fully in technical committees, one each for Fisheries, Agriculture, Forestry, Nutrition, Economics, and Information and Publications.



Representatives from 43 countries attended the meetings of the Technical Committee on Fisheries to consider the program of work for FAO's Fisheries Division. U. Khin (Burma) was elected Chairman, Thomas S. Leach



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(United Kingdom) and Joran Hult (Sweden), Vice-Chairman, and Sidney Shapiro (United States), Rapporteur. Representatives from the developing countries made strong statements requesting FAO assistance in developing the fisheries of their countries.

The report of the Technical Committee on Fisheries was approved by the FAO Conference with only several minor changes. A summary of the highlights of the report follows:

Attention was drawn to the doubling of the world's annual fishery production during the past dozen years to 38 million tons, a possible further increase to as high as 70 million tons by the end of the next decade or two, and the problems that would arise in utilizing this expanded production effectively. FAO's Fisheries Division was commended for its past and present programs and for the good balance in programs that was proposed for the coming two years.

The Fisheries Committee discussed the relationship between the Fisheries Division's regular program and aid programs, such as the Freedom-from-Hunger Campaign, Expanded Program of Technical Assistance, U. N. Special Fund, and ad hoc aid to member countries. The Fisheries Division was asked to evaluate the effect of such programs on the regular program, and to make recommendations for future appropriate consideration. Annual reviews of the status of the aid programs would also be prepared by the Division, and should prove useful in making recommendations for coordinating aid programs with the regular program, and also with those conducted by the United States and other governments.

The Fisheries Committee dealt with a number of specific programs of direct concern to United States Government fishery agencies and the fishing industry. Among the most important items were:

1. The Fisheries Committee recommended the establishment of an Advisory Committee on Marine Resources Research (which will consist of not more than 15 members) and also a Panel of Experts to deal with other subjects besides marine resources research, for example technological and economic matters. This arrangement will en-

able the Fisheries Division to obtain the advice of world-renowned experts on a continuing rather than on an ad hoc basis in all fields of fishery development. As finally worded, the Conference authorized and requested the Director-General under Article VI, paragraph 2, of the FAO Constitution to establish this Advisory Committee. The Conference also stipulated that members of the Advisory Committee and the Panel of Experts should be drawn from governmental and nongovernmental bodies of FAO Member Countries.

2. The Fisheries Committee developed working relations between FAO and UNESCO's Intergovernmental Oceanographic Commission in the field of oceanography. In accord with a resolution adopted at the first meeting in Paris (October 19-27) of the Intergovernmental Oceanographic Commission (IOC) on relationships between that organization and other organizations, the United States Delegation at the meetings of the Technical Committee on Fisheries urged FAO's Fisheries Division to cooperate fully in IOC programs so that the fisheries aspects of oceanography could be properly integrated with physical, chemical, and other aspects. The Technical Committee adopted this proposal, and also suggested that the Advisory Committee on Marine Resources Research could well be useful in advising IOC in this respect. Ad hoc cooperation between IOC and FAO has already been established and is to be continued. The Technical Committee on Fisheries also recommended that the Director-General of FAO should invite working parties and expert panels of IOC to use the facilities of the Fisheries Division.

3. The Technical Committee noted the useful recommendations of the International Conference on Fish in Nutrition, and urged the Director-General of FAO to implement these recommendations, if possible. The Advisory Committee on Marine Resources Research will be asked to evaluate the potential productivity of the world's aquatic resources and to consider methods of using this production efficiently. Education and training of fishermen, fish handlers, and processors had also been stressed in the recommendations of the Nutrition Conference.

4. The Thirty-Sixth Session of the FAO Council had already given strong approval for the Director-General of FAO to initiate action programs by fishery technologists and economists, in collaboration with the Nutri-



## International (Contd.):

tion Division, for the testing and promotion of fish protein concentrates for human consumption. The proposed programs are to include palatability and acceptability tests, controlled clinical and mass-feeding tests, and public education and promotion campaigns. Technical details concerning implementation of such programs were referred to the Technical Committee on Fisheries. The programs will be conducted under the Freedom-from-Hunger Campaign, and the active participation of industry and of WHO, UNICEF, and other organizations in the United Nations family will be sought. Fishery advisers on the United States Delegation held a series of meetings with the staff of the Fisheries Division on such matters as contributions from industry, the types of fish protein concentrates that will be used, and other technical and operational procedures. Action programs are soon to be initiated in Chile and Peru.

5. Two items on the agenda of the FAO Conference were concerned with the establishment of FAO regional fisheries commissions--one for West African countries and one for the countries bordering the South-West Atlantic. U. S. interest in these commissions stems from extensive aid programs to countries in those regions and from specific interest of the United States fishing industry in the developing fisheries of Africa and Latin America.

A resolution was adopted which now establishes a new FAO Regional Fisheries Commission for Western Africa. The resolution provides observer status for member countries of FAO that are not regional members of the Commission. The terms of reference for the establishment and operation of the Commission follow closely the recommendations of a meeting convened by the Director-General of FAO at Dakar, Senegal, in May 1961.

The FAO Conference considered a draft resolution which would establish a regional commission to be known as the "South West Atlantic Fisheries Advisory Commission." Brazil, Uruguay, and Argentina supported the resolution, as drafted. The United States spoke in favor of establishing a fisheries commission for the South American countries, provided that a majority of the countries in the region supported such a commis-

sion. However, in view of the difficulties that may arise with regards to the terms of reference, membership, geographical extent, and other matters, the United States suggested that the Conference agree in principle with the draft resolution, and authorize the Director-General to establish the Commission on the basis of statutes drawn up in consultation with the FAO Committee on Constitutional and Legal Matters. The United States proposal was adopted.

6. The Fisheries Committee commented favorably on previous worldwide meetings convened by FAO. Preparations for holding an FAO World Meeting on the Biology of the Tunas and Related Species are already under way; the United States will host this meeting at the Scripps Institution of Oceanography, La Jolla, Calif., in July 1962. Because the workload in preparing and conducting such meetings and in publishing the final results is considerable, it was suggested that, in the future, meetings be scheduled only as necessary to meet the need for inquiry into new advances in scientific and technical development. It was also suggested that regional meetings be held in preparation for worldwide meetings. The Committee subscribed to the holding of future biological meetings, for example on hake and shrimp, and to a symposium on fresh-water fish culture in 1964, all subject to the availability of funds. Other international meetings urged by the Fisheries Committee were a symposium on the role of fundamental research in the successful utilization of fishery products (a recommendation of the International Conference on Fish in Nutrition), an International Fishing Gear Congress in 1963, and a world meeting on fishery administration in the 1964-65 biennium. The possibility of holding a world symposium on fisheries oceanography in 1964 or 1965 will be explored.

Membership in the Food and Agriculture Organization has now increased to 104; 16 of these are new members mainly from Africa. FAO has grown in stature, and its prestige among developed and developing countries has increased even during the past few years. The budget appropriation for 1962 and 1963 is about 30 percent more than was voted for the previous two years--1960-61. The Fisheries Division's program of work is expanding and can be expected to expand at an even greater rate as world fishery production increases.



## International (Contd.):

Fisheries are a primary renewable resource and developing countries are turning to those resources as one of the first items in their national development programs. Logically these countries are looking to FAO for advice and guidance in biological, oceanographic, technological, and economic matters relating to fishery development. FAO's fisheries work is not confined to the developing countries. In the developed countries, new techniques and increased production are constantly creating crises in the distribution and marketing of certain abundantly-produced fishery products. FAO has in the past (e.g., the International Conference on Fish Meal held in March 1961) offered services to assist in improving the distribution and marketing of fishery products. More demands for this and other types of services can be expected in the future.

Note: See Commercial Fisheries Review, January 1962 p. 43.

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MARINE RESOURCES ADVISORY COMMITTEE APPROVED BY FAO COMMISSION:

An Advisory Committee on Marine Resources Research to aid FAO's Fisheries Division in assessing fish stocks and in oceanographic research has been approved by Commission Two, meeting in Rome in conjunction with FAO's 11th Conference.

Commission Two, which considered the Fisheries Division's entire program of work for 1962/63, also approved a fisheries advisory commission for the southwest Atlantic. This commission would function similarly to other FAO regional councils.

In describing the work of the proposed Advisory Committee on Marine Resources Research, the Director of the Fisheries Division told the delegates that the committee's first function would be to advise on the best way to use money and manpower available to further fisheries research in the marine fisheries field.

"Mainly, the commission would help the Fisheries Division's Biology Branch in preparing its program to aid both intergovernmental and international organizations in marine resources research," said the Director.

"We have already been cooperating with these organizations, but the magnitude of this work and the almost explosive growth in oce-

anographic research has made this committee necessary."

As approved by Commission Two, the advisory committee would be composed of about 10 leading fisheries scientists from countries which are either members of FAO or the U. N. At first, it would meet once a year.

Commission Actions: In other actions, the Commission urged the holding of a symposium on fresh-water fish culture in 1964, and that the possibility of holding a world symposium on fisheries oceanography sometime in 1964/65 be explored. It also approved holding a World Scientific Meeting on the Biology of Tuna in 1962, an International Fishing Gear Congress in 1963, and a world meeting on fishery administration during 1964-65. Further work on promoting the human consumption of fish protein concentrates was also approved.

The Commission recommended that more attention be given to providing bibliographic and other reference materials--for example, handbooks, lists of wholesale markets--in the field of fisheries economics where such a service is almost non-existent.

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION

FIRST SESSION HELD IN PARIS:

The first session of the Intergovernmental Oceanographic Commission (IOC) was held in Paris, October 19-27, 1961. The session was attended by representatives from 40 member governments, 4 observer governments, 6 specialized agencies of the United Nations, 10 intergovernmental organizations and nongovernmental organizations, and the UNESCO Secretariat.

The session helped clarify the special relationship of the Commission to UNESCO as prescribed in the statutes of the Commission. The Acting Director General of UNESCO stated his view that although the Commission was established by resolution of the General Conference of UNESCO to function within the framework of UNESCO, the Commission should in fact accomplish the scientific and technical aspects of its work as though it were outside UNESCO. UNESCO, on its part, would supply the necessary housekeeping and secretarial services to the Commission as well as give it general policy guidance. This unique relationship was reflected in the



## International (Contd.):

## Rules of Procedure adopted by the Commission.

No definite decision was taken by the Commission to establish advisory bodies on oceanography. In a unanimously approved resolution, the Commission invited the United Nations and its specialized agencies to cooperate with the Commission; expressed the hope that interested specialized agencies such as the Food and Agriculture Organization (FAO) and the World Meteorological Organization (WMO) would designate members of their secretariats to cooperate actively with the Secretariat of the Commission, in a manner to be decided by agreement between those agencies and UNESCO; requested the Members to submit to the Secretariat, for consideration at the second session of the Commission, their views on the advisory channels to be established; and allowed the Bureau and the Secretariat of the Commission, during the interim period, to seek and receive advice on oceanography from all sources. The United States Delegation was successful in obtaining general acceptance by the Commission of the particularly significant role which FAO could play in oceanography and more specifically in the field of fishery, oceanography, and the special competence of the Special Committee on Oceanic Research (SCOR) of the International Council of Scientific Unions (ICSU) in the other aspects of oceanography.

The Commission took the first steps to coordinate national and regional programs in oceanography and to establish the organizational mechanism, within the Commission, which could develop an integrated, well-coordinated international program in oceanography. In this connection, the Commission unanimously adopted 9 resolutions.

Also unanimously adopted were a resolution on the better utilization by member governments of oceanographers and a resolution recommending that less developed countries interested in oceanography submit requests for assistance in oceanography to the United Nations Special Fund and Expanded Program of Technical Assistance and requesting the Director General of UNESCO to consider the possibility of increasing or modifying the UNESCO program on oceanography to give more assistance to the developing countries in that field.

The work of the session was expedited by the establishment of three working groups on (1) Fisheries Aspects of Oceanography and relationships between IOC and other International Organizations; (2) Cooperative International Programs of Oceanic Investigations; and (3) Coordination of National Programs and Consideration of Technical Questions.

The Commission also established a consultative committee to advise and assist the Bureau during the period prior to the second session of the Commission.

The principality of Monaco invited the Commission, through the Director General of UNESCO, to hold its second session at Monte Carlo. The Commission, however, decided to hold its next session in Paris sometime in the autumn of 1962. (United States Embassy, Paris, November 24, 1961.)

Note: Also see Commercial Fisheries Review, January 1962 p. 44.

ORGANIZATION FOR ECONOMIC  
COOPERATION AND DEVELOPMENTFISHERIES COMMITTEE MEETS:

The Fisheries Committee of the Organization for Economic Cooperation and Development met at Paris, France, December 13-14, 1961, to consider the 1962 program of work and a study of subsidies and other financial supports to the fishing industries.

## GENERAL AGREEMENT ON TARIFFS AND TRADE

REPORT ON NINETEENTH SESSION:

New procedures for future tariff reductions, special measures to achieve broader access to world markets for agricultural products, and intensified efforts to expand the export earnings of less-developed countries were the central topics considered by the Contracting Parties to the General Agreement on Tariffs and Trade (GATT) at their Nineteenth Session which ended in Geneva on December 9, 1961. Each of these matters has been the object of intensive study by the Contracting Parties under their Program for the Expansion of Trade. They were further considered at the GATT Ministerial Meeting on November 27-30, and in accordance with decisions adopted by the ministers, the Contracting Parties approved action programs for intensified efforts to expand world trade.

Meeting from November 13 to December 9, contracting parties and governments associated with the GATT called a recess in their regular session so that trade ministers might



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meet to provide the necessary additional policy guidance for further steps to carry forward the GATT's trade expansion program.

In addition to work related to the Ministerial Meeting, the Contracting Parties at their Nineteenth Session dealt with an extensive agenda of some 60 topics including such matters as regional economic arrangements, quantitative import restrictions, the application of GATT trading rules to Japan by all contracting parties, and the welcoming of a new nation--Tanganyika--as the Fortieth Contracting Party to the GATT.

Perhaps the most far-reaching actions taken by the Contracting Parties, however, were those directed to Ministerial conclusions on the trade problems identified in the work of the Program for the Expansion of Trade and the new tasks arising from these conclusions.

The ministers reaffirmed their confidence in the General Agreement as the basis for the trading relationships of their countries and agreed that steps should be taken to increase its effective application in the three fields of action (tariff reduction, trade in agriculture, and trade with the less developed countries) which were submitted to the ministers for their consideration. The ministers adopted four conclusions, together with recommendations for additional action by the Contracting Parties:

(1) The multilateral reduction of tariffs on a most-favored-nation basis should be continued, but new techniques should be adopted, suited to the changes that had taken place in world trading relationships. In this connection one of the techniques most prominently mentioned by ministers was some form of across-the-board or linear tariff negotiation. Accordingly, the Contracting Parties established a working party on procedures for tariff reduction, which will meet in the near future to examine new procedures and techniques for the further reduction of tariffs on a most-favored-nation basis.

(2) Having expressed great concern over the degree and extent of agricultural protectionism, the ministers requested that the Contracting Parties adopt procedures designed to form the basis for the negotiation of "practical measures for the creation of

acceptable conditions of access to world markets for agricultural commodities."

(3) The ministers' discussion of obstacles to the trade of less-developed countries reflected widespread concern that the present rate of growth of the export earnings of the less-developed countries is not keeping pace with the growth of their foreign exchange requirements and recognition that aid can be no substitute for trade in the financing of economic development. Accordingly, the ministers adopted a United States-sponsored declaration on promotion of the trade of less-developed countries. The declaration recognizes the need for a special effort by all governments to expand the export earnings of the less-developed countries, particularly through providing improved access to markets, and sets forth certain guiding principles to this end. The ministers further agreed that their governments should observe these principles as fully as possible, with the aim of reducing obstacles to the trade of the less-developed countries in the near future. Moreover, in response to an appeal from the less-developed countries for some concrete measures of assurance that early progress will be made, the ministers asked the Contracting Parties to draw up specific programs of action for the reduction of trade barriers and to establish procedures for keeping under review the actions taken by individual governments to improve market opportunities for the less-developed countries.

Besides adopting the declaration on the promotion of trade of less-developed countries, the Contracting Parties agreed that preliminary arrangements for future action programs envisaged by the ministers would be undertaken at a meeting of the GATT's Committee III prior to February 1962. The Contracting Parties also accepted the conclusion of most of the ministers that the question of duty-free entry for tropical products should be given careful consideration.

Finally, the ministers considered the situation resulting from the fact that the GATT was not being applied to trade relations between Japan and some of the contracting parties. Some ministers expressed the hope that early action could be taken by the contracting parties concerned to enable Japan to participate fully in the GATT, and agreed that such action would greatly add to the effectiveness of the GATT. The United States strongly supported this conclusion.



International (Contd.):

Other noteworthy trade policy matters before the Contracting Parties were regional trading arrangements, including the European Economic Community (EEC), the European Free Trade Association (EFTA), and the Latin American Free Trade Area (LAFTA): programs designed to eliminate or significantly reduce quantitative import restrictions still imposed by some contracting parties; and a new free trade area established between Sarawak and North Borneo. Decisions were also taken agreeing to the accession to the GATT of Israel and Portugal upon the completion of certain formalities relating to tariff negotiations both countries completed during the 1960/61 GATT tariff conference.

EUROPEAN FREE TRADE ASSOCIATION

**COUNCIL ACCELERATES  
10 PERCENT TARIFF CUT:**

The European Free Trade Association (EFTA) Council of Ministers met in Geneva, November 20-21, 1961, and decided to cut tariffs among EFTA members by a further 10 percent in 1962, in order to keep pace with similar tariff cuts in the Common Market. This marked a steep acceleration in tariff cutting since, under the Stockholm Convention (EFTA's "constitution"), the next tariff cut was not due until July 1, 1963.



The first EFTA tariff cut, one of 20 percent, was made on July 1, 1960, less than two months after EFTA came into being. The next cut, one of 10 percent, was scheduled for January 1, 1962, but was actually put into effect on July 1, 1961.

The new 10 percent cut--bringing the total to 40 percent--will be implemented by Denmark, Portugal, Sweden, Switzerland, and the United Kingdom on March 1, 1962, and by Austria and Norway not later than September 1. (EFTA Reporter, November 29, 1961.)

Note: See Commercial Fisheries Review, August 1961 p. 50.



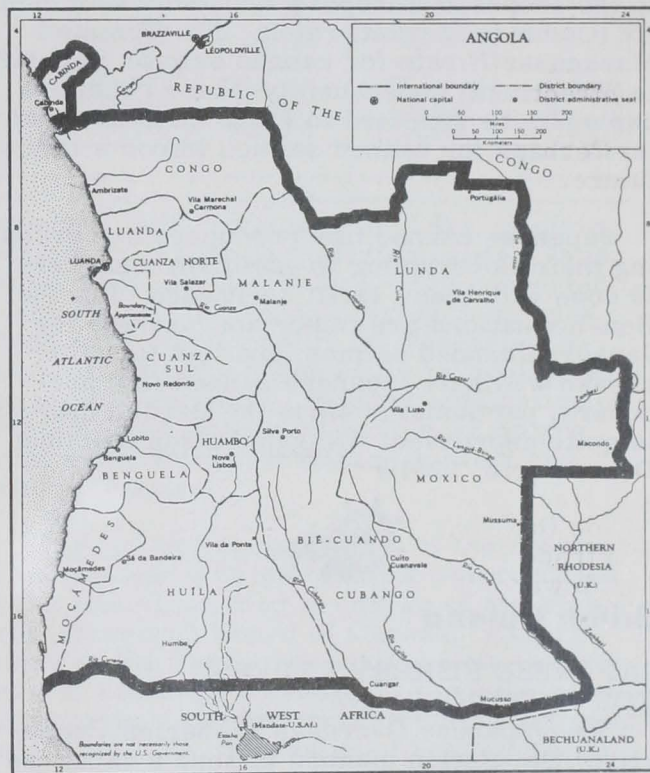
**Angola**

**GOVERNMENT PLANS FOR  
FISHERIES DEVELOPMENT:**

As a part of an over-all plan for improving the economic status of the country, the

Government of Angola has outlined a fishery development plan.

In ocean fishing it plans to (1) intensify and orient studies of ocean biology, especially those regarded as economically useful; (2) introduce new methods (e.g. trawling) to permit the catch of more valuable species and in more abundant quantities; (3) improve present fishing methods; and (4) improve and equip processing plants for more efficient utilization of the fish catch.



In inland waters, the Government plans to (1) increase fish production; and (2) intensify fish culture in ponds as a means of supplementing the diet of people in the interior. (United States Consulate, Luanda, October 24, 1961.)



**Benelux Countries**

**CANNED FISH IMPORT TARIFFS  
TO BE RAISED:**

The Benelux countries (Belgium, the Netherlands, and Luxembourg) are reported to have informally approved higher tariff rates on imports of canned food effective January 1, 1962, according to information released by the Belgian Embassy in Tokyo, Japan. The



## Benelux Countries (Contd.):

new tariff schedule as it affects certain canned fishery products is:

Product	Present Tariff Rate	New Tariff Rate
	... (Percent ad valorem) ...	
Canned salmon . . . . .	0	6
Canned sardine . . . . .	20	21.5
Canned herring . . . . .	20	23

The Benelux countries raised their national tariff rates to bring them a step closer to the proposed European Economic Community (Common Market) rates. The Common Market tariff rate for canned salmon imports is 20 percent; consequently, these countries can again be expected to raise their national tariff rates for canned salmon imports in the future.

Japanese canned fish producers are pressing their Government to establish measures to cope with these tariff increases, for the Benelux nations are important markets for Japanese canned salmon, and this tariff increase will hurt Japanese canned fish producers, particularly since the British market is quite depressed. (Nippon Suisan Shimbun, December 6, 1961.)



## British Guiana

## JAPANESE FISHERY EXPERT FOR BRITISH GUIANA:

The Japanese Overseas Fisheries Cooperative Association planned to send a Japanese fishery expert, employed by a large Japanese fishing company, to British Guiana in December 1961. The expert, to be sent in response to a British Guiana request, will be employed by a British Guiana company under a two-year contract and will serve as master of a trawler newly added to that company's fishing fleet. He is the second Japanese fishery expert to be sent to British Guiana. (Shin Suisan Shimbun Sokuho, November 25, 1961.)



## Canada

## ANNUAL MEETING OF FISHERIES RESEARCH BOARD OF CANADA:

Increased efficiency in fishing methods, improvements in fish handling, and efforts to overcome water pollution were commended by the Canadian Fisheries Minister as among the more valuable contributions of the Fisheries Research Board of Canada. The Minister spoke on January 4, 1962, at the opening of the annual meeting of the Board in Ottawa, Canada. The meeting ended on January 8.

Studies toward making the best and fullest possible use of the fish catch are most important, he said, as the gap between available food and the needs of the growing number of people continues to widen. "The Board's scientists have in my view contributed very substantially already in improving methods of fish handling, preservation and processing, and in developing byproducts as well," he said. "The proposed studies leading toward increasing our fishing efficiency in international waters so that Canadian fishermen can continue to reap their fair share of the international catch in the face of growing competition are, in my view, also very important. That a concerted effort toward achieving this is being planned by the Board, the Department of Fisheries, and other government agencies is highly commendable."

The Minister referred to the dangers of water pollution, saying that progressive industrialization and urbanization of a country was often paralleled by threatening pollution of its waters. "Our particular responsibility is on the effects of pollution on aquatic life, and our job is one of prevention rather than correction where this can be done. But as new chemicals and new pollutants are being added to our waters daily we must at least be able to recognize and neutralize, if we can't avert. This is not an easy task, but it is one where we cannot sidestep responsibility."

The Board is made up of 16 members in addition to the full-time chairman. The members appointed by the Minister of Fisheries for five-year terms and serve without pay. They are chosen from Canada's leading scientists, the fishing industry, and the Federal Department of Fisheries.

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Canada (Contd.):

**BRITISH COLUMBIA SALMON PACK, 1961:**

Salmon, British Columbia's principal dollar earner, experienced the second best year since 1958 when 1,900,025 cases were packed. The 1961 pack was up 122 percent from that for 1960 and was 30.3 percent more than

have been brought about by the development of refrigerated sea-water transportation and storage of fish, a January 4, 1962, news release from the Canadian Department of Fisheries pointed out.

One refrigerated sea-water salmon packer (transport vessel), with a capacity of 450,000

British Columbia Canned Salmon Pack, 1956-61

	1961	1960	1959	1958	1957	1956
	(Standard Cases--48 1-Lb. Cans)					
Sockeye (red) . . . . .	398,303	226,905	256,170	1,074,305	228,452	320,096
Springs (king) . . . . .	7,488	5,913	15,230	10,550	10,481	11,671
Steelhead . . . . .	979	500	867	1,205	1,126	1,254
Blueback . . . . .	12,521	23,456	10,114	11,103	12,147	10,549
Coho (silver) . . . . .	228,213	68,891	202,991	120,424	180,911	207,366
Pink . . . . .	661,103	219,624	458,597	451,802	751,608	363,633
Chum (keta) . . . . .	95,387	86,800	133,128	230,636	239,539	203,710
Total . . . . .	1/1,403,994	1/632,089	1/1,077,097	1,900,025	1,424,264	1,118,279

1/Includes fish canned from previous year's frozen fish.

that for 1959. The 1961 pack was almost 74 percent of the pack reported in 1958. The leading species packed was pink salmon, followed by red or sockeye, coho or silver, and chum or keta.

Note: See Commercial Fisheries Review, January 1961 p. 57.

\* \* \* \* \*

**DEVELOPMENT OF ACTIVE TUNA FISHERY IN PACIFIC:**

The development of an active tuna fishery in the Pacific based in British Columbia maybe brought closer to reality by work now being carried out by the Fisheries Research Board of Canada at its technological station in Vancouver.

This work, described at the Board's annual meeting in Ottawa, involves the design of freezing equipment which can be used at sea to preserve the catch and enable vessels to range far offshore. The Board's technologists are working with the Industrial Development Service of the Federal Department of Fisheries on the project, which in its present state is intended to equip four big seiners with suitable freezing systems which will differ in certain important respects from those now in use on United States tuna vessels. The equipment being designed is felt to have many advantages for local vessels.

\* \* \* \* \*

**REFRIGERATED SEA WATER USED TO TRANSPORT AND STORE SALMON:**

Revolutionary changes in the handling of salmon in certain areas of British Columbia

pounds of fish, completed in 1961, is giving thoroughly satisfactory performance. Other packers already in use are being converted to employ the same engineering principles, which were developed by the Fisheries Research Board of Canada at its technological station in Vancouver. Similar application of refrigeration techniques have been or are being made to halibut fishing vessels and salmon trollers.

This industrial application of the results of technological investigations was reported at the annual meeting in Ottawa of the Fisheries Research Board of Canada. Experiments at the Vancouver station over the past several years have resulted in principles which include the means of driving equipment for the vessels, the design of heat exchange units, and construction of tanks and piping with a view to ease of sanitation.

\* \* \* \* \*

**ANTIBIOTICS USED TO PRESERVE FISH FILLETS:**

An example of the adoption by the Canadian fishing industry of the developments of research at the Vancouver, B. C., technological station is the use of antibiotics as preservatives for food fish. This method is now being used extensively for filets in the Maritime provinces of Canada, according to a January 4, 1962, news release of the Canadian Department of Fisheries.

\* \* \* \* \*



Canada (Contd.):

VACUUM METHOD OF  
CANNING HERRING DEVELOPED:

A method of canning herring developed by the Technological Station of the Fisheries Research Board of Canada in Vancouver, B. C., has been brought into commercial use by a British Columbia cannery. The method, involving a stage in processing where the herring is placed under vacuum, produces a firmer, more palatable product than older methods. It was described at the Board's annual meeting in Ottawa.

The vacuum is drawn immediately after precooking, when the herring are in open, inverted cans in the steam retort. Vacuum is maintained for several minutes after which sauces are added, the cans sealed, and the cooking process completed.

Among the advantages of the vacuum method is a rapid cooling effect which firms up the fish. Relatively simple adjustments and equipment are necessary to convert the steam retorts to the vacuum process.

\* \* \* \* \*

NEW METHOD OF UNLOADING SALMON  
FROM VESSEL TO REDUCE HANDLING:

A new method of unloading salmon that can substantially reduce or eliminate fish handling from the vessel to the plant is the subject of an engineering project at the Technological Station of the Fisheries Research Board of Canada in Vancouver, B.C.

The idea of such a method, involving the use of pressurized containers aboard vessels, was initiated by a British Columbia fishing company. Engineers at the Technological Station designed and tested a working model, based upon the original suggestion but involving important changes in design. The project was described at the annual meeting of the Board.

The model worked effectively with herring and a full-scale system was installed on the salmon packer Nootka Chief. In practical use, the unloading system has duplicated the success of test runs on the working model.

Investigation into the engineering and economic features of the equipment are to continue.

\* \* \* \* \*

"BLOWN" FISH OILS  
PRODUCED BY SCIENTISTS:

"Blown" fish oils that could be used as additives to conventional lubricants have been produced by scientists of the Halifax technological station of the Fisheries Research Board of Canada in their search for new ways to develop byproducts from the fishery resources of the Atlantic. Although fatty oils have been used as lubricants for centuries, often in the form of soaps, there has been relatively little use for marine oils for lubrication.



However, the Halifax station's scientists have concluded successful experiments with cod-liver oil and herring oil which may interest processors and oil companies in the use of these products as additives to lubricants. Details of the project were given in Ottawa at the annual meeting of the Research Board.

Before the advent of petroleum many fats and oils from plants and animals, including even butter, were used as lubricants. Within the last few decades the direct use of these materials as lubricants has practically vanished. Some, however, are still used as additives in certain lubricants since they adhere to metal surfaces and improve the stability of the oil layer between the surfaces. The oil most commonly used for this purpose today is derived from rapeseed.

To improve the characteristics of these oils, large quantities of air are blown through the oils at high temperatures. This thickens the oil to improve its viscosity characteristics and at the same time stabilizes it against



## Canada (Contd.):

further decomposition in operation at high temperatures often found in machines.

Since the cost of "blown" vegetable oil is high as compared to marine oil, it is possible that this fact could create more interest by oil companies in the use of fish oils as additives. The Halifax experiment has shown that by careful processing a "blown" marine oil can be produced that would meet most specifications required by oil companies.

The project has not been geared to produce oil in sufficient quantity for evaluation by oil companies. However, the process has been perfected and is available to Canadian industry if it wishes to use it.

\* \* \* \* \*

STUDIES ON HORMONES IN SALMON:

Studies on hormones in Pacific salmon have recently been extended to include the Atlantic salmon. All five species of Pacific salmon die after spawning while many Atlantic salmon do not. The present studies are being undertaken with a view to gaining a better understanding of this phenomenon, and were outlined at the annual meeting of the Fisheries Research Board of Canada.

Results to date show that there is an impaired elimination of hormones in spawned Pacific salmon which does not occur with spawned Atlantic salmon. This research is being carried out at the Board's technological station in Halifax.

\* \* \* \* \*

PLANKTON RESEARCH:

Plankton--the very foundation of the pyramid of life in the sea--is the subject of an intensive and stimulating program of research at the Nanaimo Biological Station of the Fisheries Research Board of Canada. Scientists at the British Columbia station are opening the door on increased knowledge of the tiny organisms, both plant and animal, which are at the bottom of the food chain of the sea. These microscopic creatures and plants are present in greater numbers and higher concentration than any other form of life in the ocean. Yet, to the present time, serious gaps exist in scientific information about them.

The current research program in this field, described at the Board's annual meet-

ing in Ottawa, is aimed at finding out as much as possible about these members of the phytoplankton and the zooplankton families--the number of different species, how fast each reproduces, how useful they are in the food chain.

To get this information, completely new techniques of investigation have been developed by scientists at the Nanaimo Station. These include a method of isolating a body of water in a submerged plastic sphere where plant organisms were grown under conditions closely approaching those of nature.

To further laboratory research, electronic equipment has been adapted or developed specially for this purpose. Among the new devices is one which may enable scientists to monitor concentrations of new growths of plant organisms in the sea through aerial surveys.

The significance of these studies is enormous. In effect, the basic foodstuffs of the sea support all marine life, as their presence in quantity or otherwise determines the growth and survival of the next higher organism, and so on.

\* \* \* \* \*

EFFECT OF WINDS, TIDES, AND SEASONS ON OCEAN SURFACE CURRENTS STUDIED:

Progress is being made in assessing the uneven lag of various parts of the ocean surface in responding to such forces as winds, tides, and seasons, according to a report to the annual meeting of the Fisheries Research Board of Canada by its Pacific Oceanographic Group.

Changes in barometric pressure cause winds, it was explained, and winds cause surface currents and a degree of drift which must be taken into account in navigating a vessel. But there is enough lag in each step from cause to effect to enable an expert weatherman on land to collect barometric reports, work out varying probable drifts for a number of different areas, and publish monthly charts.

This interplay of forces is fairly uniform on the open ocean, it was further explained, but nearer the coast is greatly complicated and locally varied by the shape of the sea bottom and the coastline, which may increase or diminish the local effect of wind and tide



Canada (Contd.):

and lengthen or shorten the period of lag in the sea's response.

\* \* \* \* \*

#### NEW RESEARCH VESSEL BEING BUILT:

Construction was started early in January 1962 on a new ocean-going research vessel--the CGS "G. B. Reed." The G. B. Reed is to operate in North Pacific waters.

The 177-foot vessel, which will cost approximately \$1.8 million, is being built in Victoria, B. C. The construction schedule calls for launching in September 1962 and delivery to the Fisheries Research Board of Canada in November.

The G. B. Reed will be a sistership to the Board's A. T. Cameron which operates in the Northwest Atlantic.

The new vessel will be, in effect, a floating scientific laboratory, and her facilities will incorporate the very latest equipment to enable scientists to carry out work at sea. Investigations in the North Pacific Ocean will include those required of Canada under the International North Pacific Fisheries Commission.

The G. B. Reed will have a cruising range of 8,500 miles and trips lasting 4 to 5 weeks will be possible. It is estimated that the vessel will be at sea for up to 250 days each year. A single high-powered Diesel engine will give the ship a cruising speed of 12 knots. Like the laboratory facilities, the navigational and fish-finding equipment will be the most modern available.

The vessel will be equipped with bottom and midwater trawls, gill nets, long lines, and other specialized fishing gear as well as winches and rigging for conventional oceanographic survey operations.

The vessel will join a fleet of four research vessels operated by the Fisheries Research Board of Canada on the Pacific Coast. They are the A. P. Knight, the Investigator I, the Alta, and the Noctiluca. The largest is the A. P. Knight, a 77-footer.

The home port of the G. B. Reed will be Victoria, B. C., but the scientific staff will

be from the Nanaimo Biological Station of the Fisheries Research Board of Canada.

Note: See Commercial Fisheries Review, August 1961 p. 59.

\* \* \* \* \*

#### COMMERCIAL FISHING AREAS EXPANDED IN NORTHWEST TERRITORIES:

Commercial fishing in the Northwest Territories, hitherto restricted to Great Slave Lake in Mackenzie District, has been expanded to include 8 designated areas in the Mackenzie and Keewatin districts on a rotating basis, the Canadian Department of Fisheries announced early in December 1961.

Quotas computed on annual catch limit rates have been set for each of the lakes in the 8 areas. In 6 of the areas each lake will be open for two years or until its quota has been filled, after which it will be closed for 4 years. In the other two areas, the maximum two-year opening will be followed by a two-year closure.

Commercial fishing in some lakes, designated as experimental areas, will be confined to a short summer season. In the remainder, fishing will be allowed on a year-round basis within the restrictions of the quota system.

Operations on Great Slave Lake, which has been fished commercially for the past 16 years, will continue to be governed by existing regulations.

The only other commercial fishing operations in the Northwest Territories are the Arctic char fishery recently developed through Eskimo cooperatives. (The Fisherman, December 8, 1961.)

\* \* \* \* \*

#### NEW BRUNSWICK FISH MEAL PRICES, DECEMBER 1961:

Fish-meal prices (60-percent protein) quoted by New Brunswick producers late in December 1961 and late in November 1961 averaged about C\$120 a short ton (\$2.00 a protein unit) for both exports and domestic sales. The price has remained the same since late July 1961. (United States Consulate, Saint John, N. B., Canada, December 28, 1961.)





## Denmark

### FLATFISH FILLETING MACHINE TESTED:

A filleting machine for flatfish was reported operating successfully for two weeks' as of mid-December 1961 in the plant of the Esbjerg fishery exporter who invented it, according to the November 30 issue of the daily newspaper, Vestkysten. The inventor, I.C.C. Dyekjaers, reports the machine, which was constructed in Lubeck, West Germany, cuts fillets in an excellent manner but a number of months of operation under regular production will be required before it can be fully tested. Numerous filleting plants in Denmark have ordered the new machine from the Lubeck factory but the latter will await further operating reports before making deliveries in any quantity. (Fisheries Attache, United States Embassy, Copenhagen, report of December 13, 1961.)

\* \* \* \* \*

### 4TH INTERNATIONAL FISHERIES TRADE FAIR:

The 4th International Fisheries Trade Fair 1962 will take place in Copenhagen, April 14-23, 1962. Billed as the world's largest trade fair for fisheries, it will be held in The Forum, Scandinavia's largest exhibition hall. About 85 percent of the exhibition space already has been reserved. In the current list of 115 exhibitors from 14 countries, the United States was represented by five manufacturers as of early December 1961.

Exhibitors plan to show the most recent developments in fishing gear, motors and engines, navigation equipment, processing machinery, etc. At the 3rd Fair, held in Copenhagen, September 25-October 4, 1959, exhibitors reportedly made sales of almost US\$29 million. Visitors are expected from at least 33 countries.

Denmark's Fisheries Minister is patron for the Fair, and it is supported also by the Danish Fisheries Council and the Chamber of Manufacturers. (Fisheries Attache, United States Embassy, Copenhagen, report dated December 5, 1961.)

\* \* \* \* \*

### FISHERY TRENDS, DECEMBER 1961:

Catch in 1961 Sets Record: Preliminary data on Danish fishing craft landings through November 1961 indicate that the 1961 catches of most major species have been significantly larger than in 1960. The year's total will surpass the record landings of 1959 of 638,000 metric tons. Better fish

meal prices favored increased industrial fish landings while the excellent demand for fishery exports expanded food fish production.

Common Market Fisheries Policy: The Danish Fisheries Ministry has not scheduled formal meetings with representatives of other countries for discussions leading to development of a fisheries policy for the Common Market. However, the topic is becoming of greater interest among member and prospective member countries. National fishery representatives do discuss the subject informally at meetings called for other purposes. It undoubtedly was discussed at the committee meeting of fishery administrators in London the week of December 11 under the auspices of the Permanent Commission of the International Fisheries Convention of 1946.

Fisheries Ministry Proposes Aid for Exporters: Two proposals of the Fisheries Ministry to aid Danish fish exporters are expected to be recommended to the Government shortly. One would have the Government assume the cost of the fishery export control expenses which are now met by a two-tenths of one percent tax on exports paid by the exporters. In recent years exports have been valued at more than 400 million kroner (US\$58 million). Thus, the saving to exporters would be over 800,000 kroner (\$116,000). Agriculture is seeking the same relief. The second proposal involves increasing the sum allotted for export promotion from the current 50,000 kroner (\$7,250) to 175,000 kroner (\$25,400) the first year and to possibly 200,000 kroner (\$29,000) annually later.

Costs and Earnings of Fishermen to be Studied: The total income of Danish fishermen has increased this year, making it difficult for them to convince others that the fishing industry has economic problems. The fishermen contend that increases in operating costs far exceed the increases in income but have supplied no specific accounting of their operations which would demonstrate their profits or losses. Earlier attempts to obtain such information were unsuccessful. The Committee on Profits and Loans of the Fisheries Commission (consists of 27 members from the fishing industry, the Parliament, and the Fisheries Ministry; it was established by the Ministry on June 27, 1961) is making a renewed attempt to secure the desired information which is meeting with much greater success in the preliminary stages. Questionnaires were being prepared in December 1961 in final form for distribution.

Minimum Size of Plaice Increased: The Danish Fisheries Association has sent a proposal to its 160 local organizations that the minimum size for plaice (*Pleuronectes platessa*) be voluntarily raised from 26 to 27 centimeters (10.2 to 10.6 inches) in order to decrease market supplies. The order would remain in effect until further notice. Earlier this year the Association sought a minimum price regulation but because of the time required has shifted to a larger minimum size fish.

There were many complaints about the low prices of plaice in 1961 with the smaller sizes selling, at times, at such low levels they were bought for mink food and reduction purposes. It was contended that even the larger more desirable sizes sold, on occasion, for one krone per kg. (6.6 U.S. cents a pound) under what was characterized as a "dumping" price.

The increase in the minimum size is expected to decrease landings significantly. Danish biologists favor the proposal in the interest of greater protection for the resource. The fishery for plaice is Denmark's most valuable single fishery.

Pond Trout Association Formed: Pond brook or rainbow trout growers are forming a new association to handle their mutual interests with governmental authorities, including such problems as tax questions, pollution problems, etc. A former association, which also was concerned with trade problems, disbanded in 1960 after disagreements over marketing matters.

Funds Available for Increasing Fisheries Productivity: Suggestions for the expenditure of 75,000 kroner (\$10,900) for increasing productivity in the Danish fisheries have been invited from the industry by the Fisheries Ministry. The advice



was due December 11, 1961, and was expected to concern exploratory fishing, and improvements in vessel and gear equipment and operations. The funds represent the fishing industry's allotment from a larger fund available to other industries.

**Two New Cooperative Filleting Plants Proposed:** Fishermen in Esbjerg are considering the establishment of two new cooperative filleting plants. The November "buyers strike," which developed from a dispute over adherence to auction regulations, stimulated the Esbjerg Fisheries Association to initiate a plan for a cooperative filleting plant owned by fishermen. While it is recognized considerable capital will be required, the opportunity to acquire an outlet for their catches, which they will control, has induced more than 30 fishermen to sign up for shares valued at 100,000 kroner (\$14,500).

Andelssildeoliefabriken (The Cooperative Herring Oil Factory) in Esbjerg is one of the world's largest fish meal and fish oil plants. Its management has become interested in establishing a filleting plant because about 50 of its more than 250 shareholders now fish exclusively for food fish rather than industrial fish. Preliminary investigations of the project are under way with regard to construction costs, equipment, markets, etc., so that a comprehensive proposal may be presented to members at the forthcoming general meeting. (December 13, 1961, report from the Fisheries Attache, United States Embassy, Copenhagen.)

Note: Values converted at rate of 1 kroner equal US\$0.145.



## El Salvador

### SHRIMP FISHERY TRENDS:

Based on preliminary recommendations, the Government as of late 1961 suspended the issuance of new licenses to catch shrimp until a study of shrimp possibilities by an expert of the Food and Agriculture Organization (FAO) had been completed. Considerable interest in El Salvador's lobster potential developed during the last few months of 1961, and many persons are making plans to begin lobster fishing.

Boat owners reported a monthly shrimp catch per boat of up to 9,000 pounds as of December 1961, substantially more than the monthly catch of 4,000 pounds of a few months ago but less than the monthly average of 15,000 pounds for the same period of 1960. It is hoped that the FAO study can shed some light on the cause of this decrease, though some observers believe that it is caused by a combination of climatic factors and the increased number of boats in the fishery.

Interest has also developed in shark fishing possibilities, with several fishermen actively planning expansion in that field. (United States Embassy, San Salvador, December 6, 1961.)



## Fiji Islands

### GOVERNMENT WELCOMES JAPANESE TUNA FISHING BASE:

Japanese plans to establish a large tuna fishing base, complete with freezing and canning facilities, at Levuka, Fiji Islands, appear to be moving forward smoothly. The seven-man survey team headed by a Japanese Diet member, including two other Diet members and a Fisheries Agency official, returned to Tokyo on December 21, 1961, after a two-week on-the-spot survey in Fiji.

Reportedly, the Japanese delegation met with the Fiji House Speaker, who was said to be greatly enthused over Japanese plans to establish a large fishing base and to emigrate 2,000 Japanese to Levuka over a four-year span. Establishment of the base is most welcome since the Fiji Islands have only one industry--sugar--and plans apparently are being made to widely publicize the affair in Fijian newspapers.

Agreement is said to have been made during this trip to have the proposed Levuka base furnish the Japanese tuna mothership fleets operating in nearby seas with supplies and water. (Suisan Keizai Shimbun, December 23, 1961.)



## France

### FIRST BIENNIAL INTERNATIONAL FISHERIES SHOW:

The first Biennale Internationale des Peches (Biannual International Fisheries Show) will be held at Lorient (Morbihan) on the Atlantic shores of Brittany from May 25 to June 3, 1962. The object of the exhibition will be to publicize and promote everything related to the fishing industry from the supertrawler to frozen packaged fish. The fair is being privately sponsored by the city of Lorient and will be the only large fair in France in this field during the year 1962. The last major French fisheries fair was held about two years ago at Boulogne.

American firms can exhibit directly or through local representatives and applications for space should be made directly to the Secretariat General, Biennale Internationale des Peches, Hotel de Ville, Lorient (Morbihan).



France (Contd.):

Covered exhibits will be housed in exhibit halls to be erected for the event. Each hall will be able to accommodate about 50 stands. Fifteen such halls are planned so as to provide enough space for 750 stands. In addition, there will be ample space for out-of-doors exhibits.

Exhibits will cover all aspects of the fishing industry, including supertrawlers. Included in the displays will be mechanical, electronic, radio, radar, and refrigerating equipment; optical instruments; filleting and processing machinery; deep-freezing equipment; retail refrigerator cases; trucks for transporting fresh and frozen fish; etc. ...

The fair will also be highlighted by gastronomic events and by stands devoted to the art of cooking sea products which should have wide appeal to the general public.

Technical conferences are planned but the program has not yet been announced.

consumed in France, facilities for handling and selling frozen foods, including super markets, are being built very rapidly throughout the country. Production and consumption of frozen fish should enjoy a tremendous development in France over the next few years, and there would seem to be an excellent market potential here for equipment and technical know-how in that field.

A significant portion of the fair is being devoted to new types of fishing equipment including electronic devices. European interest in such equipment is strong. (United States Embassy, Paris, November 27, 1961.)



German Federal Republic

FISH MEAL PRICES, NOVEMBER 29, 1961:

Prices reported at Hamburg Commodity Exchange as of November 29, 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 <sup>1/</sup>	US\$/Short Ton
German .....	55-60	loco/prompt	577.50	130.98
" .....	60-65	" "	590.00	133.81
Peruvian .....	65-70	loco "	585.00	132.68
" .....	65-70	Dec. 1961	585.00	132.68
" .....	65-70	Jan. 1962	560.00	127.01
" .....	65-70	Feb.-July 1962	550.00	124.74
Angola .....	65-70	Dec. 1961/Feb. 1962	602.50	136.65
Portuguese .....	50-55	Nov. 1961-Jan. 1962	568.00	128.82
Icelandic herring .....	70-75	Nov. 1961-Feb. 1962	705.00	159.89
South African .....	65-70	Dec. 1961-Jan. 1962	595.00	134.95
" .....	65-70	Feb.-May 1962	580.00	131.54

<sup>1/</sup>Values converted at rate of 4.0 deutsche marks equal US\$1.

Note: "Loco" means where and as it is at the time of sale, and all subsequent expenses to be at buyer's account.

Representatives from all sectors of France's fisheries industry should be attracted to this fair and numerous industry visitors from other European countries can also be expected. The fair would therefore seem to be an excellent vehicle for promoting fishery equipment and products. According to press reports, firms from 26 countries including Japan, Peru, and the Republic of South Africa have already expressed an interest in participating.

Equipment and techniques used in the packaging, freezing, storing and handling of frozen fish should be of particular interest to the French industry. While frozen fish now represents only a small percentage of the total fish

As compared with November 3, 1961, prices on the Hamburg Exchange on November 29, 1961, were up substantially for every type of fish meal. (United States Consulate, Bremen, December 6, 1961.)

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FISH BODY OIL MARKET, SEPTEMBER 1961:

Total West German imports of edible fish body oil in January-September increased from 40,549 metric tons in 1960 to 43,597 tons in 1961; exports increased from 13,367 tons to 15,366 tons. The amount of United States oil in West German imports dropped from 33.8 percent in 1960 to 5.9 percent in 1961, but Peru's share increased from 27.0 percent to 63.8 percent during the same period.

According to the leading local fish oil importer, the use of fish oil in margarine production has been maintained at a fairly steady level by the industry. At present, margarine



## German Federal Republic (Contd.):

Country of Origin	IMPORTS								
	September 1961			Total by Weight		Average Prices 2/			
	Quantity	Value 1/		September		September		September	
		1,000 DM	US\$ 1,000	1961	1960	1961	1960	1961	1960
	Metric Tons			(Percent)		(DM/Metric Tons)		(U.S.¢/Lb.)	
Iceland .....	376,0	173	43	6.1	0.5	460	385	5.2	4.4
Denmark .....	607,7	390	98	9.9	18.1	642	649	7.3	7.4
Netherlands .....	349,2	180	45	5.7	2.1	515	563	5.8	6.4
Norway .....	191,8	188	47	3.1	18.5	980	826	11.1	9.4
United States .....	1,216,8	636	159	19.8	21.4	523	672	5.9	7.6
Chile .....	194,8	105	26	3.2	-	539	714	6.1	8.1
Peru .....	3,204,7	1,796	449	52,2	23,0	560	530	6.4	6.0
Total .....	6,141,0	3,468	867	100,0	-	565	-	6,4	-
Total September 1960 .....	3,704,9	2,398	600	-	1/83,6	-	647	-	7,3
Country of Destination	EXPORTS								
	September 1961			Total by Weight		Average Prices 3/			
	Quantity	Value 3/		September		September		September	
		1,000 DM	US\$ 1,000	1961	1960	1961	1960	1961	1960
	Metric Tons			(Percent)		(DM/Metric Tons)		(U.S.¢/Lb.)	
Netherlands .....	220,0	118	29	19,8	16,5	587	536	6,7	6,1
Norway .....	1,116,8	691	173	80,2	83,5	675	619	7,7	7,0
Total .....	1,336,8	809	202	100,0	-	605	-	6,9	-
Total September 1960 .....	1,880,5	1,237	309	-	100,0	-	658	-	7,5

1/ Believed to be the value at port of entry in Germany.  
 2/ Other countries: Great Britain - 12,9 percent; Portugal - 0,3 percent; Argentina - 3,2 percent.  
 3/ Believed to be the value at port of shipment in Germany.  
 Source: Federal Office of Statistics, Wiesbaden.  
 Note: Values converted at rate of 4 DM equal US\$1.

manufacturers have large fish oil stocks on hand, which reportedly are sufficient to carry their production through April 1962.

United States menhaden oil is currently offered at \$120 per metric ton (5.4 U.S. cents a pound), c.i.f. Rotterdam or Scandinavian port. But according to the local source, little or no business is transacted on this basis. Some sales of U.S. menhaden oil were transacted early in December 1961 at \$116 per ton (5.3 U.S. cents a pound). Peruvian exporters have contracted sales at \$113-\$114 a ton (5.1-5.2 cents a pound), c.i.f. Rotterdam or Scandinavian port for delivery in May 1962, but the early December 1961 price for Peruvian fish oil was \$116 per ton (5.3 cents a pound). According to the local importer, the headquarters of the largest British user and buyer in London has instructed its West European affiliates, including those in West Germany, to stop buying fish oil until at least January 1962. The British firm will reportedly buy if Peru offers fish oil at \$110 per ton (5.0 cents a pound). German fish body oil early in December 1961 was quoted at about DM 450-460 a metric ton (5.1-5.2 cents a pound), ex factory, but it is difficult to get German oil for delivery before March 1962. The local source was optimistic concerning export possibilities for German oil from the 1961/1962 winter production. (United States Consulate, Bremen, December 6, 1961.)



## Ghana

### JAPANESE FIRM CONSTRUCTING FISH COLD-STORAGE PLANT:

A large Japanese fishing company as of November 1961 was constructing large cold-storage facilities at Tema, Ghana, to handle the catch of its Atlantic trawler fleet, reported to total six trawlers, mostly in the 2,500-ton class. The company is said to be planning on increasing its trawler fleet in the Atlantic Ocean and may build more freezing plants in West Africa. Reportedly, many other foreign fishing firms are interested in joining the Japanese firm in developing new base facilities in West Africa, particularly after the company announced that it planned to establish a large fishing base at Tema. (Shin Suisan Shimbun Sokuho, November 17, 1961.)

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### FISHERIES DEVELOPMENT AID FROM DENMARK REQUESTED:

The Danish Ambassador to Ghana in Accra has received a letter from the Ghana Na-



## Ghana (Contd.):

tional Cooperative Fishing and Marketing Association, Ltd. requesting assistance in establishing joint fisheries ventures in the territorial waters of Ghana. The Association stated it was the only acknowledged national organization for fisheries in Ghana. It wished to receive offers from recognized fishery companies in important fishing countries for a joint fishery operation conducted under a bilateral agreement giving mutual satisfaction. Denmark was approached because it built fishing craft and fished in open ocean waters. It was hoped that private Danish fishing companies would contact the Association with regard to utilizing the very great resources in Ghana's territorial seas. If this was not possible the Association desired a connection through which arrangements could be made for renting fishing craft.

The request was made public in the Danish press in mid-December 1961 and in fishery trade publications. (December 13, 1961, report from the Fisheries Attache, United States Embassy, Copenhagen.)



## Iceland

## FISHERIES TRENDS, NOVEMBER 1961:

Iceland's herring catch off the southwest coast as of mid-November 1961 continued favorable--so much so that it was feared there were not sufficient contracts to take care of potential sales of herring for salting, normally the preferred process. Salted herring contracts to that date were for 40,000 barrels to the U. S. S. R., 20,000 barrels to Poland, 20,000 barrels to West Germany, and 4,000 barrels to East Germany.

The press announced on November 21 that a special trawler investigating committee headed by the Director of Fisheries had made recommendations to the Government on drastic measures for assisting the Icelandic trawler industry. The recommendations, which were being studied by the Cabinet, were not revealed.

Possible special subsidies for the trawler industry may be foreshadowed by press reminders that the British Parliament recently passed an Act providing for a 10-year as-

sistance program for the British trawler industry. (United States Embassy, Reykjavik, November 22, 1961.)

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## EXPORTS OF SELECTED FISHERY PRODUCTS, JANUARY-SEPTEMBER 1961:

Exports of Iceland's most important commodities for January-September 1961 include several fishery items of interest to the United States fisheries. There was a considerable increase in exports of fish meal and herring meal as compared with January-September

Product	Jan.-Sept. 1961		Jan.-Sept. 1960	
	Qty.	Value <sup>1/</sup>	Qty.	Value <sup>1/</sup>
	Metric Tons	US\$1,000 f.o.b.	Metric Tons	US\$1,000 f.o.b.
Salt herring . . . . .	19,266	4,015	12,629	1,888
Salt fish . . . . .	28,243	7,165	21,837	4,837
Stockfish . . . . .	7,156	3,892	4,202	1,813
Fish on ice . . . . .	24,326	2,437	16,409	1,274
Frozen fish . . . . .	31,283	11,005	48,647	13,265
Shrimp & lobster, frozen	354	629	348	550
Herring, frozen . . . . .	10,069	1,117	5,765	373
Herring oil . . . . .	11,006	1,515	27,372	2,896
Fish meal . . . . .	26,694	2,482	8,025	718
Herring meal . . . . .	22,550	2,713	11,599	1,060
Ocean perch meal . . . . .	3,581	375	8,368	661

<sup>1/</sup>Value converted at rate of 1 kronur equals 2.32 U. S. cents.

1960 (see table), according to the National Bank of Iceland's October 1961 Statistical Bulletin. Exports of frozen fish, herring oil, and ocean perch meal were much lower.

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## FISHERY LANDINGS BY PRINCIPAL SPECIES, JANUARY-SEPTEMBER 1961:

Species	January-September	
	1961	1960
	.. (Metric Tons <sup>1/</sup> ) ..	
Cod . . . . .	175,589	220,511
Haddock . . . . .	27,086	23,963
Saithe . . . . .	8,374	6,712
Ling . . . . .	4,034	4,374
Wolfish (catfish) . . . . .	11,338	7,740
Cusk . . . . .	3,677	5,487
Ocean perch . . . . .	23,464	40,020
Halibut . . . . .	1,214	1,187
Herring . . . . .	250,805	111,084
Shellfish . . . . .	2,478	1,819
Other . . . . .	7,712	5,581
Total . . . . .	515,771	428,478

<sup>1/</sup>Except for herring which are landed round, all fish are drawn weight.

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## FISHING EXCEPTIONALLY GOOD IN 1961:

From the viewpoint of total fish landings as well as for both the north and south coast herring catches, 1961 was ex-



## Iceland (Contd.):

pected to show up as a most exceptionally good fishing year for Iceland. Estimates place the total 1961 catch at about 100,000 metric tons more than the 1960 catch of 513,744 tons.

The share of the trawlers in this catch, as compared with that of the motor fishing vessels, was expected to be even less in 1961 than in 1960. According to statistics from the Fisheries Association of Iceland, the trawler catch was 58,449 tons by the end of September 1961 as compared with 85,647 tons at the end of September 1960. The further pushing seaward on March 11, 1961, of the areas protected from trawling operations by the Icelandic Government by inclusion of certain base line areas obviously further tipped the scales in favor of the Icelandic motor fishing boats, which are permitted to fish within the 12-mile and base line areas.

The very exceptional herring catch last summer off the north coast of Iceland was followed by what appears to be an equally record-breaking catch for the south coast. By December 15, 1961, the south coast herring catch was twice as great as that at the same time in 1960, and amounted to 380,257 full barrels of herring, or about 38,000 metric tons, compared with 19,000 tons landed by the same time in 1960. The herring catch during October and November 1961 was reported to have been an all-time record herring catch for Iceland for those two months. Excellent fishing conditions continued to prevail during the first three weeks of December.



Barrels of herring being readied for shipment.

The herring contracts abroad had not been filled as of late December 1961. This was partly due to the rather low fat content of the catch as a whole. About 80,000 barrels of herring had been salted as of December 15, 1961, compared with 33,000 barrels at the same time in 1960. An effort was being made to marinate some 20,000 barrels of herring, which should add considerably to the total value of the catch. A feature of some importance in 1961 was the fresh-freezing of a sizable part of the south coast herring catch. Five trawler loads were landed at German ports the first part of December.

The latest contract for south coast salted herring sales was signed on December 8, 1961. This provided for 40,000 barrels of herring to be delivered to the Soviet Union, making the Soviet contract one for delivery of 80,000 barrels of herring, all of which must be of at least 15-percent fat content. As of the end of December 1961, total foreign salted herring contracts were for 125,000 barrels. The Herring Production Board has also contracted to deliver 20,000 barrels of south coast herring to West Germany and 20,000 barrels to Poland. The remaining 5,000 barrels consist largely of fully processed herring for the United States market, and low-fat content herring for the East German market. The Herring Production Board is attempting to conclude further contracts with the

United States, Rumania, and East Germany. (United States Embassy, Reykjavik, December 27, 1961.)

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### PRODUCTION OF PROCESSED FISHERY PRODUCTS AND BYPRODUCTS, JANUARY-SEPTEMBER 1961:

Product	Quantity 1,000 Metric Tons	Value	
		Million Kronur	US\$ 1,000
<b>Frozen:</b>			
Fillets .....	39.3	656.4	15,285
Fish waste .....	8.9	15.9	370
Herring .....	8.4	50.1	1,165
Fish roe .....	0.7	10.1	235
Shrimp and lobster .	0.2	20.0	465
Total Frozen .	57.5	752.5	17,500
<b>Cured:</b>			
Salt fish, dried . . .	4.0	79.9	1,858
Salt fish, wet . . . .	25.0	255.6	5,944
Stockfish .....	7.2	185.7	4,319
Herring, salted . . .	40.8	343.7	7,993
Fish roe .....	0.4	3.3	77
Other .....	1.0	8.3	193
Total Cured . . .	78.4	876.5	20,384
<b>Canned:</b>			
Shrimp .....	1/	4.6	107
<b>Byproducts:</b>			
<b>Meal:</b>			
Herring .....	35.6	191.6	4,456
Ocean perch . . . .	4.4	21.8	507
Lobster .....	0.2	0.2	5
Liver .....	0.3	1.5	35
Other .....	16.7	88.4	2,056
<b>Oil:</b>			
Ocean perch . . . .	1.0	4.8	112
Herring .....	35.0	174.9	4,067
Cod-liver . . . . .	5.9	35.3	821
Solubles (50% solids) .....	2.9	5.3	123
Total Byproducts	102.0	523.8	12,182
<b>Miscellaneous:</b>			
Whale products . . .	5.5	35.7	830
Trimmings . . . . .	0.1	1.3	30
Total Misc. . . .	5.6	37.0	860
Grand Total . . .	243.5	2,194.4	51,033
Fish landed abroad	24.1	112.6	2,618
Home consumption	12.8	33.7	784
1/ Includes 60 tons of shrimp.			
Note: Values converted at rate of 43 kronur equal US\$1.00.			

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### UTILIZATION OF FISHERY LANDINGS:

January-August 1961: Landings of fish and shellfish in January-August 1961 were substantially higher than in the same period of 1961.



## Iceland (Contd.):

Table 1 - Iceland's Fishery Landings, January-August, 1960-1961

How Utilized	January-August	
	1961	1960
	.. (Metric Tons) ..	
<b>Herring<sup>1/</sup> for:</b>		
Oil and meal .....	179,779	87,923
Freezing .....	10,204	1,944
Salting .....	54,498	17,266
Fresh on ice .....	4,119	645
<b>Groundfish<sup>2/</sup> for:</b>		
Fresh on ice landed abroad .....	16,960	12,727
Freezing and filleting .....	118,049	159,693
Salting .....	63,545	66,585
Stockfish .....	42,495	50,641
Home consumption .....	5,595	5,771
Oil and meal .....	2,998	4,401
<b>Shellfish for:</b>		
<b>Freezing:</b> Lobster .....	1,410	1,621
Shrimp .....	304	-
<b>Canning (shrimp) .....</b>	126	-
<b>Total production .....</b>	<b>500,082</b>	<b>409,217</b>
<sup>1/</sup> Whole fish.		
<sup>2/</sup> Drawn fish.		

January-September 1961: Increased landings of herring were mostly responsible for the increase in landings from 1960 to 1961.

Table 2 - Iceland's Fishery Landings, January-September, 1960-1961

How Utilized	January-September	
	1961	1960
	.. (Metric Tons) ..	
<b>Herring<sup>1/</sup> for:</b>		
Oil and meal .....	180,767	90,809
Freezing .....	10,730	2,352
Salting .....	55,075	17,278
Fresh on ice .....	4,119	645
Canning .....	114	-
<b>Groundfish<sup>2/</sup> for:</b>		
Fresh on ice landed abroad .....	19,994	15,591
Freezing and filleting .....	125,506	169,111
Salting .....	64,532	68,244
Stockfish .....	43,028	51,359
Home consumption .....	6,201	6,423
Oil and meal .....	3,227	4,847
<b>Shellfish for:</b>		
<b>Freezing:</b> Lobster .....	1,488	1,819
Shrimp .....	747	-
<b>Canning (shrimp) .....</b>	243	-
<b>Total production .....</b>	<b>515,771</b>	<b>428,478</b>
<sup>1/</sup> Whole fish.		
<sup>2/</sup> Drawn fish.		



## India

## INDO-NORWEGIAN FISHERIES DEVELOPMENT PROJECT:

A tripartite agreement was signed in New Delhi on November 27, 1961, between the United Nations, the Government of Norway, and the Government of India to modify and expand the scope of the existing fisheries development project, confined to the state of

Kerala prior to the new agreement. Extension of the Indo-Norwegian fisheries project to cover other maritime states in India is the principal feature of the new agreement.

According to press reports, the Norwegian India Foundation has agreed to contribute Rs. 6.74 million (US\$1.4 million) towards completion of the remaining capital investments under the existing project and Rs. 3.32 million (\$0.7 million) a year for financing the activities envisaged in the new agreement.

The first Indo-Norwegian project, relating to fisheries development in Kerala State, has been in operation now for more than five years based on a tripartite agreement between the United Nations, the Government of Norway, and the Government of India signed in October 1956. The project was formulated with a view to raising the standard of living of the fishermen in the area through higher returns for their work, efficient distribution of fresh fish, improvement of fish products, and improvement of health of the fishing population. The contribution of the Norwegian Government has been in the form of financial and technical assistance viz., equipment, machinery, experts, and fellowships. From its inception through March 31, 1960, the progressive Norwegian expenditure on the project totaled approximately 21.9 million rupees (\$4.6 million). The entire aid has been channeled through the United Nations.

The present agreement is in the nature of an extension pact of the original project. According to available information, the fisheries development work will first be extended to the states of Mysore and Madras because of their contiguity with Kerala and similarity of fishing operations. It is also proposed to establish a new fisheries station at Cochin under the expanded project to conduct marine research and experimental fishing along the sea coast. The Cochin Station will train personnel in fishing operations, manufacture and maintenance of fishing gear, fish processing and marketing. (United States Embassy, New Delhi, December 12, 1961.)



## Israel

## JOINT JAPANESE-ISRAELI FISHING COMPANY PLANNED:

A Japanese fishing company is reportedly planning to form a joint Japanese-Israeli fish-



## Israel (Contd.):

ing company in Israel this year. Early in 1961 the Japanese firm conducted experimental tuna fishing off the coast of West Africa. Having obtained fairly good results, the firm decided to proceed with arrangements to establish a joint fishing company in Israel. Under this plan, Japan and Israel would each contribute 50 percent towards the establishment of the joint fishing company, which would engage in the production of tuna and fish meal.

Negotiations for this joint venture are currently in progress. However, various conjectures are being made as to whether the Japanese Government would approve this plan since other Japanese fishing companies are already undertaking the establishment of fishing bases on the West African coast. (Shin Suisan Shimbun Sokuho, December 19, 1961.)

Editor's Note: One large Japanese fishing firm has a base in Las Palmas, Canary Islands, and is constructing another at Monrovia, Liberia. Another firm is reported to be constructing cold-storage facilities in Tema, Ghana, and a third firm has a 14,000-ton fish meal factoryship operating in Angolan waters.



## Italy

IMPORT LIMIT PLANNED FOR JAPANESE FROZEN TUNA:

Italy plans to limit frozen tuna imports from Japan to 14,000 metric tons a year, according to informed Japanese exporters. Reportedly, Italy hopes to import frozen tuna from other European countries and plans to control imports from Japan by taxing Japanese imports exceeding 14,000 tons. Italy had earlier agreed to admit Japanese frozen tuna free of duty until 1970, and so the Japanese exporters consider this most recent Italian plan as being separate from the earlier agreement made by Italy.

While the foregoing plan purportedly contemplated by Italy appears to be aimed at restricting imports of Japanese tuna, Japanese observers do not feel that it will ever seriously affect Japanese exports, since so far there is no visible evidence of a move to

restrict Italian imports of Japanese frozen tuna. (Shin Suisan Shimbun Sokuho, December 14, 1961.)

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COMMERCIAL FISHERIES INDUSTRY:

Italy's commercial marine fisheries industry is based principally at three large ports: Trapani for Sicily and the Mediterranean, Leghorn for the North and Atlantic fisheries, and Ancona for the Adriatic and Ionian Seas. Milan, the river port, is the center for fresh-water fisheries.

But the commercial fisheries industry also operates from these smaller centers: In the Tyrrhenian Sea there are the ports of Sardinia, Liguria, Tuscany, Latium, Campania, Calabria, Messina, and Palermo. The ports situated on the Adriatic are Brindisi, Bari, Malfetta, Manfredonia, Trani, Le Pugli. Finally, there are the ports of Abruzzi, Marche, Emilia, Venetia, Monfalcone, and Trieste.

Italian fishery catches and landings are not sufficient for the domestic demand and the needs of canneries. The country imports fishery products from Netherlands, Iceland, Norway, Spain, and Portugal. When Italy used to be a colonial power, its fisheries were developing along the coasts of Libya, Abyssina, and the Red Sea. But since World War II Italy remains confined to the Mediterranean.

Tunisia is constantly interfering with fishing operations by seizing Italian boats along the Sicilian coasts. Yugoslavia does the same along the Adriatic coasts.

Motorized trawlers go as far as the Atlantic. The trips of these trawlers last three months on the average. Operating costs are barely covered in spite of increasing fish prices, which in Italy are higher than in all of the neighboring countries. (France Peche, October 1961.)



## Japan

UNITED STATES TUNA MARKET SURVEYED BY JAPANESE FISHERY AGENCY:

In accordance with Japan's Agriculture and Forestry Minister Kono's plan to increase



Japan (Contd.):

tuna exports to the United States, the Fishery Agency undertook a survey of United States fish market trends in November 1961 and was expected to present its findings to the Minister. The Fishery Agency's studies included: (1) fish consumption and fish supply trends in the United States; (2) growth of tuna market demand in the United States; and (3) Japan's tuna production potential to meet tuna demand in the United States. The Agency is said to be considering two alternatives for increasing Japanese tuna production to meet possible increases in tuna exports to the United States: (1) enlarging the 100-ton class vessels (which are considered uneconomical) and permit them to engage in distant-water fishing; and (2) expanding the scope of activities of the coastal fishery to embrace tuna fishing. (Shin Suisan Shimbun Sokuho, December 2, 1961.)

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**TUNA EXPORTERS SEEK 100 PERCENT LETTER OF CREDIT:**

The Japanese Atlantic Tuna Committee has tentatively adopted a 100-percent letter of credit plan to cover exports of frozen tuna to the United States, and plans to negotiate this matter with the United States buyers. United States frozen tuna importers are reported to be opposed to this plan.

Presently, letter of credits issued to Japanese tuna exporters guarantee payments up to 95 percent of the total export price, with 5 percent being withheld to allow for claims against green meat tuna. (Shin Suisan Shimbun Sokuho, November 25, 1961.)

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**PROPOSED FREIGHT RATE REDUCTION FOR FROZEN TUNA SHIPMENTS TO U. S.:**

The Japanese Frozen Foods Exporters Association is carefully studying the Japan Freight Conference's offer to reduce freight rates on frozen tuna shipped to the United States from \$55 to \$50 a short ton. In effecting this reduction, the Freight Conference asks that the Association revert to the use of scheduled freighters for shipping frozen tuna to the United States. By this move, the Conference hopes to win back some of the freight transportation business it lost to trampers (non-scheduled freighters), which today handle approximately 54,000 tons of

approximately 100,000 short tons of frozen tuna annually exported to the United States. While favoring the freight rate reduction, the Association does not intend to give the Freight Conference assurance that trampers would not be used. Four large Japanese fishery firms, which ship much of their cargo by trampers, do not seem to particularly welcome the freight rate reduction offered by the Conference.

Some United States packers are reported to have asked the Association to cooperate with the Conference as soon as possible, since this reduction will affect the price paid for frozen tuna. (Shin Suisan Shimbun Sokuho, December 15, 1961.)

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**ATLANTIC OCEAN FROZEN TUNA EXPORT PRICES:**

The Atlantic Ocean Tuna Committee of the Japan Frozen Foods Exporters Association held a meeting on November 21, 1961, to study tuna price revisions and adopted the following prices f.o.b. West Africa for Atlantic Ocean tuna to be exported to the United States in December 1961: albacore \$350 a short ton, yellowfin gilled and gutted \$270 a ton, and dressed yellowfin \$280 a ton.

The Committee also set the export price of frozen tuna f.o.b. Cristobal, Panama Canal Zone, at \$10 per short ton below that of frozen tuna exported to the United States from Japan proper.

At a meeting held on December 1, the Atlantic Ocean Tuna Committee recommended the establishment of the following new floor prices (f.o.b.) for frozen tuna exported to Europe between January and March 1962:

	Yellowfin-Albacore-Bluefin		Big-Eyed	
	Jan.-Mar. 1962	Current Price	Jan.-Mar. 1962	Current Price
	..... (Per Metric Ton) .....			
Exports to: Italy & Czechoslovakia .....	\$310	\$290	\$280	\$275
Yugoslavia, Tunisia, & Libya	320	300	290	285

The present system of price classification, one for big-eyed and one for yellowfin tuna, is to be continued, with albacore and bluefin placed under the yellowfin classification. Lots of mixed fish containing more than 50 percent big-eyed tuna shall be sold under the big-eyed price; those containing less than 50 percent big-eyed will be sold under the yellowfin price classification. (Shin Suisan Shimbun Sokuho, November 24 and December 5, 1961.)

**Translator's Note:** As of December 8, 1961, yellowfin, albacore, and bluefin tuna exported to Europe were reported by selling for around \$340 a metric ton (f.o.b.)

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**CANNED TUNA EXPORTERS REJECT PACKERS' PROPOSAL TO RAISE PRICES:**

The Japan Export Frozen Tuna Producers Association informed the Japan Canned Foods



## Japan (Contd.):

Exporters Association of its desire to increase the prices of canned tuna in brine for export to the United States. The increase requested was 50 cents a case above the current prices of \$9.65 per case (7-oz. 48's) f.o.b. Japan for canned white meat tuna, and \$7.60 per case (7-oz. 48's) f.o.b. Japan for canned light meat tuna. The Producers Association proposed to apply the new prices on 125,000 cases each of canned white and light meat tuna scheduled for sale around December 10, 1961.

The Canned Foods Exporters Association held a meeting on December 5, 1961, at which time it rejected the packers' proposal to raise the export prices of canned tuna in brine. (Suisan Tsushin, December 1; Suisan Keizai Shimbun, December 7, 1961.)

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CANNED TUNA IN BRINE  
EXPORT PRICES RAISED:

Japanese prices of canned tuna in brine for export to the United States were raised for December 1961 sales. Canned white meat No.  $\frac{1}{2}$  (48 7-oz. cans a case) was raised \$0.30 per case to \$9.95 per case f.o.b. Japan, while prices on all other sizes of canned white meat tuna were raised \$0.25 per case. Canned light meat tuna was raised \$0.10 per case for all can sizes. This now brings the price of light meat tuna No.  $\frac{1}{2}$  (48 7-oz. cans a case) to \$7.70 a case f.o.b. Japan.

A total of 230,000 cases of canned tuna--130,000 cases of white meat tuna and 100,000 cases of light meat tuna--were expected to be offered for the December sales. (Suisan Tsushin, December 15, 1961.)

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CANNED TUNA IN BRINE EXPORTS  
TO UNITED STATES:

According to official information received by the Japan Canned Foods Exporters Association, canned tuna in brine imported into the United States on and after December 15, 1961, has been taxed at the higher tariff rate of 25 percent ad valorem. However, the Association reportedly continued to export canned tuna to the United States, even at the higher tariff rate. The Association expected to continue canned tuna exports to the United States under the higher tariff rate until the

quantity exported reached 50,000 cases in December 1961. (Suisan Tsushin, December 20, 1961.)

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EXPORTS OF CANNED TUNA  
SPECIALTY PRODUCTS:

Sales of canned tuna specialty products (known as "tender tuna"), which a Japanese firm began to export in February 1961, have totaled about 30,000 cases as of early December 1961. Sales were made to West Germany, Australia, Southeast Asia, and Okinawa.

Exports to West Germany averaged approximately 3,000 cases (Japanese flat No. 2 cans) per month, and West Germany is reported to be reselling the Japanese products to other European countries. Exports to other countries consisted mainly of Japanese flat No. 3 cans. The Japanese firm plans to produce between 300,000 and 350,000 cases of canned "tender tuna" in 1962 and hopes to export to West Germany an average of 6,000 cases per month, or about 72,000 cases in 1962.

Initially, exports of canned "tender tuna" consisted mainly of tuna packed in tomato sauce or tuna seasoned with curry, but other varieties of canned "tender tuna" have been exported, including large quantities of "tender tuna" packed in oil and seasoned with soy sauce.

Another canner, which has been packing curry tuna, vegetable tuna, and sandwich tuna since June 1961 has sold some 70,000 cases of those products. These sales were not as high as expected and the reason is the retail price of ¥65 (18 U.S. cents) a "half" can was considered too high. The firm is planning to pack in "quarter" cans in 1962. The firm plans to pack a total of 150,000 cases of one brand of the specialties in 1962. (Suisan Tsushin, December 12, 1961.)

Note: See Commercial Fisheries Review, April 1961 p. 66, and February 1961 p. 52.

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NEW CANNED TUNA EXPORT  
REGULATIONS ANNOUNCED:

On December 1, 1961, the Japanese Ministry of International Trade and Industry (MITI) announced the following new regulations governing exports of canned tuna to the United States, which will be in effect from December 1, 1961, through November 30, 1962.



## Japan (Contd.):

I- Limits on variety: Canned tuna exports to the United States shall be limited to the following varieties: canned tuna in brine; tuna spread; pet food.

II- Authorized quantity for export: The total export quota for canned tuna in brine shall be fixed and the allocation of the quota to exporters shall be computed as follows:

A- Export quotas shall be allocated on the basis of actual quantities of canned tuna in brine and canned tuna in oil exported to the United States during the period January 1, 1950, through December 31, 1955. In allocating quotas, quantities of less than 10 cases shall be counted as 10 cases.

B- Exporters receiving allocations of less than 1,000 cases under the above method of calculation shall be assigned the following adjusted quotas: (1) exporters allotted between 10 and 300 cases shall be allocated 500 cases; (2) exporters allotted between 300 and 500 cases shall be allocated 800 cases; and (3) exporters allotted between 500 and 990 cases shall be allocated 1,000 cases.

III- Supplementary documents: Exporters applying for approval to export canned tuna in brine to the United States must submit either one of the following two documents with their applications:

A- Export certificate issued by the Japan Canned Foods Exporters Association showing quantity of export.

B- Documentary proof of sales contract concluded with the Tokyo Canned Tuna Sales Company, Ltd. For members of the Japan Canned Foods Exporters Association, documentary proof of sales contract concluded with the Tokyo Canned Tuna Sales Company may be substituted in lieu of the Exporters Association's export certificate until such time that the Association's "Regulation on quantities of canned tuna to be exported to the United States" are released. Export quotas covered in the Association's regulation shall be based on can size No. 2 48's (U.S. No.  $\frac{1}{2}$  7-oz. 48's) as the standard case. Conversion rates for canned tuna of other sizes shall be as follows:

Japanese Can and Case Size	Equivalent U. S. Can and Case Size	Conversion Factor
Tuna No. 1 can, 24's	13-oz. 24's	0.94
Tuna No. 3 can, 48's	3-1/4-oz. 48's	0.48
Tuna 2-kg. cans, 6's	4-lb. 6's	1.16

IV- Tuna spread and pet food: Exporters applying for approval to export tuna spread and pet food to the United States must submit the following documents:

A- Tuna spread - Certificate of inspection issued by the Canned Foods Inspection Association.

B- Pet food - Certificate of inspection issued by the Ministry of Agriculture and Forestry.

V- Country of destination: The term "United States" as used in the regulation refers to the United States of America, District of Columbia, Puerto Rico, Virgin Islands, Panama Canal Zone, Guam Island, Samoa, Wake Island, Midway Island, Canton and Enderbury Islands (Phoenix Islands group), and St. Thomas Island.

VI- Export performance report: With the exception of members of the Canned Foods Exporters Association, all exporters applying for approval to export canned tuna in brine to the United States must submit to MITI by December 12, 1961, export licenses (customs clearance forms) covering the period January 1, 1950, through December 31, 1955, for certification of their export records. (Suisan Keizai Shimibun, December 2, 1961.)

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## EXPORT TO U. S. OF CANNED TUNA PACKED BY MALAYAN-JAPANESE CANNERY APPROVED:

The Japanese Fisheries Agency in December 1961 was reported to have approved the application to export canned tuna in brine to the United States submitted by the overseas company, acting as sales agent for the jointly-operated Malayan-Japanese tuna company located in Penang, Malaya. The Malayan cannery reportedly is facing a financial crisis and the Fisheries Agency, rather than permit that company to fail, has approved its export application but has indicated that the quantity for export would be less than the 46,000 cases requested by that company. Opinion is that the Agency will likely set that company's export quota at 30,000 odd cases.

The Malayan cannery was packing only canned tuna in oil for export to Europe. Its production of canned tuna in oil was 18,020 cases (48 No. 1/2 or 7-oz. cans) July-December 1960, 44,000 cases January-July 1961, and an estimated 35,000 cases July-December 1961.

The Fishery Agency's approval of the Malayan firm's application to export canned tuna in brine to the United States marks a significant departure from established policy. In the past, Japanese overseas fishing establishments have been prohibited from exporting their canned products directly to the United States. Also, in this same vein, exports of Japanese frozen tuna to foreign countries which would likely export canned tuna products to the United States, and thereby compete directly with Japanese canned tuna exports to the United States, have been prohibited.

Considerable speculation is going on in Japan as to measures the Fisheries Agency may adopt in handling future requests to establish canning facilities abroad and to export canned tuna produced at these overseas bases to the United States. Firms with bases in New Hebrides, North Borneo, Argentina, and Brazil, are reported to be equipped to immediately undertake such an operation. Also, the Fisheries Agency is now expected to have a more difficult time in refusing requests from such countries like Spain to import tuna caught by Japanese vessels operating in the Atlantic Ocean. Such requests until now have been refused since those countries would be competing directly with Japan for the United States canned tuna market.

The initial establishment of the Malayan-Japanese tuna firm had been strongly opposed by the Japanese tuna canning industry on the grounds that it would not be possible for that company to make a go of it merely by packing canned tuna in oil for export to Europe, and that eventually that company would seek to export its products to the United States. Despite this strong opposition from the canning industry, the Fisheries Agency and the parent of the Malayan firm established the joint Malayan-Japanese firm in Penang. (Suisan Tsushin, December 21 & 25, 1961.)

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## WINTER ALBACORE TUNA FISHERY UNDER WAY:

Japanese fishing for winter albacore was concentrated as of mid-December 1961 around 38° N. latitude, east of Kinkazan, Miyagi Prefecture, replacing good mackerel-pike fishing and the prolonged skipjack tuna fishing season in that area.

The Sumiyoshi Maru No. 18 (145 tons) of Tokushima Prefecture landed its final mackerel-pike catch in Shiogama around mid-December and was making preparations for win-



## Japan (Contd.):

ter albacore fishing, loading bait and other necessary materials. It was expected to sail for the above fishing ground with a number of vessels from Shizuoka and Mie Prefectures. Winter albacore fishing was expected to be in full swing when the vessels arrived on the fishing ground. (Suisan Keizai Shimibun, December 16, 1961.)

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YAIZU FISHERY LANDINGS,  
NOVEMBER 1961:

A total of 8,875 metric tons of fish were landed at Yaizu, leading Japanese tuna fishing port, during November 1961. (Suisan Keizai Shimibun, December 9, 1961.)

Yaizu Fishery Landings, Principal Species, November 1961			
Species	Landings	Ex-Vessel Value	Average Price
	Metric Tons	US\$	US\$/Metric Ton
Bluefin .	5,546	1,483,755	\$268
Albacore.	344	134,086	390
Skipjack .	1,588	312,119	197
Mackerel	139	26,386	190

\* \* \* \* \*

FORECAST FOR TUNA FISHING  
IN EASTERN PACIFIC:

The Kanagawa Prefecture Fisheries Experimental Station in Japan released in mid-December 1961 its forecast of tuna fishing in January 1962 for the eastern Pacific. The estimate was given on the basis of metric tons per 800 hooks.

Second Fishing Area (5°-20° N. latitude, east of 150° W. longitude): Over the entire sea area west of 110° W. longitude, from 5°-13° N. latitude, the black marlin catch was expected to be 0.42 ton. The big-eyed catch east of 130° W. longitude was forecast at 5 tons, while west of that line it was expected to be only 0.8 ton. Also, the yellowfin catch east of 130° W. longitude was expected to be higher than west of that line at 0.5 ton in the east and 0.2 ton in the west.

Third Fishing Area (5° N. latitude-10° S. latitude, east of 150° W. longitude): A good period for big-eyed fishing was expected in the area from the equator to 5° S. latitude, an increase in catch in the area between 5° and 7° S. latitude, and an end of good fishing in the area between 7° and 10° S. latitude. In both of the first two areas the rate of catch

was expected to be about 5 tons, and 4.2 tons for big-eyed around 110° W. longitude. Yellowfin were expected to move northward from around 10° S. latitude gradually to 4° S. latitude and the catch rate was expected to be 2.6 tons. The black marlin catch was expected to vary from area to area but generally a rate of 0.4 ton was expected.

Fourth Fishing Area (10°-30° S. latitude, east of 150° W. longitude): In the sea area east of the Pomotsu Islands 18°-23° S. latitude, albacore catch rate was to be comparatively high at about 1.8 tons. The catch rate should be some 1.4 tons for black marlin in the area around those islands. Also, the area at 120° W. longitude with a catch rate of 4 tons is an extension of the third fishing area in the Eastern Pacific. (Japanese periodical, December 18, 1961.)

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TUNA MOTHERSHIP CATCH  
IN SOUTH PACIFIC AREA:

A Japanese fishing company's tuna mothership Jinyo Maru (7,161 gross tons), which operated in the South Pacific Ocean, was scheduled to return to Tokyo on November 27, 1961. This mothership, which was accompanied by 40 catcher vessels, is reported to have caught a season total of 3,200 metric tons of fish, of which albacore tuna made up 36 percent (1,152 metric tons) and yellowfin tuna 28 percent (896 metric tons). (Hokkai Suisan, November 20, 1961.)

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## SOUTH PACIFIC TUNA OPERATIONS:

The Japanese tuna mothership No. 3 Tenyo Maru operating in the South Pacific Ocean was reported to have caught 771 metric tons of albacore and 130 metric tons of yellowfin tuna, and 495 metric tons of spearfish, as of December 20, 1961. (Suisan Keizai Shimibun, December 24, 1961.)

The Japanese tuna long-line vessel Choko Maru (159 gross tons) was reported in mid-December 1961 to be returning to its home port at Kesennuma in northern Japan with a load of fish taken from the waters east of Australia. The Choko Maru, which operated in the area bounded by 150° to 157° E. longitude and 14° to 24° S. latitude, caught a total of 80.6 short tons of fish taken in 31 sets, primarily albacore, followed by spearfish



Japan (Contd.):

and yellowfin tuna. (Suisan Keizai Shimbun, December 20, 1961.)

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#### DISTRIBUTION OF TUNA IN THE PACIFIC OCEAN:

A lecture on the distribution of tuna in the Pacific Ocean was given by the Director of the Nankai-ku Fisheries Research Institute in Magasaki, Kyushu, under the sponsorship of the Fisheries Section, Nagasaki Municipality.

The substance of this lecture was that the distribution of tuna in the Pacific Ocean is a belt-like area stretching from east to west centered around the equator. The higher the latitude, the less the fish schools are distributed. Each tuna species, however, lives in a certain section of the belt, different from others. There are known to be about 13 sections.

Tuna migration may be classified into two types; one under the same living conditions and the other caused by a change of living conditions which usually takes place in March and September of each year.

Spawning occurs in a wide area for a considerable length of time and the number of eggs from one fish is more than one million. Striped marlin spawn in comparatively high latitude areas.

Japanese waters are not particularly favorable to tuna, but the living conditions of tuna (including seasonal conditions) are fairly well known and planned production can be carried out.

In the Pacific, the more easterly a section is located, the larger the size of fish found in that section. The thickness of the schools remains the same throughout the year and fishermen can build vessels based on their judgment of the species in which they are primarily interested and their ability to swim. (Suisan Keizai Shimbun, November 17, 1961, and other periodicals.)

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#### TROPICAL ATLANTIC TUNA FISHING IMPROVES:

According to Japanese reports coming from the fishing areas, albacore tuna fishing

by Japanese vessels off Recife, Brazil, began to improve in September 1961. November-December 1961 yellowfin and albacore tuna fishing off Africa also entered the seasonal peak. But fishing was not yet completely satisfactory because the average catch per day for a 400-ton long-line vessel was 8-9 metric tons, which is the same as in 1960. Seasonal peak fishing was expected to last until January 1962 and much was expected of future fishing.

Export demand for frozen tuna from Atlantic production has held steady since June and July 1961. In fact, the available supply was considered inadequate. For this reason, Atlantic tuna was selling at the export price of around US\$300 per metric ton c.i.f.

Mid-December 1961 export prices for Atlantic frozen tuna were \$310 a metric ton for Italy, \$320 a ton for Yugoslavia and Tunisia, and \$340-\$350 a short ton for albacore transshipped to the United States. These prices were substantially higher than \$260 for Europe and \$310 for transshipment to the United States reported for the same period in 1960. Compared with the same period in 1960, total exports of frozen Atlantic tuna April-November 1961 increased 10 percent in quantity and about 20 percent in value.

Reflecting the gradual rise in frozen Atlantic tuna prices in the United States, tuna shipped directly from Japanese ports as of mid-December 1961 was priced \$70-\$80 a short ton higher than in 1960. The tuna catch in the Pacific towards the last part of 1961 was showing the same tendency as Atlantic tuna when compared with 1960. For frozen Pacific tuna as of mid-December 1961, prices were \$390 per short ton f.o.b. for albacore and \$340-\$350 for yellowfin shipped directly from Japan. The prices were \$310 on albacore and \$270 on yellowfin in the same period of 1960. (Suisan Keizai Shimbun, December 18, 1961.)

\* \* \* \* \*

#### TUNA FISHING IN THE ATLANTIC OCEAN SLOW IN 1961:

Japanese tuna fishing in the Atlantic Ocean was reported slow during 1961. Late in December 1961, a total of 52 Japanese tuna vessels were operating in the Atlantic Ocean. About 40 of those were concentrated in the albacore fishing area off the coast of South America. While the catch increased somewhat early in December 1961, fishing was still



## Japan (Contd.):

generally slow compared with the same period of 1960.

Yellowfin and big-eyed tuna catches off the coast of West Africa were reported as very light, with yellowfin making up from 20 to 40 percent of the daily landings.

The number of tuna vessels operating in the Atlantic Ocean during 1961 was 10 less than in 1960. However, 6 vessels are scheduled to be added to the tuna fleet in 1962, which will bring the Atlantic Ocean tuna fleet up to 58. (Suisan Tsushin, December 20, 1961.)

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#### JAPANESE HOPE TO ESTABLISH FROZEN TUNA WAREHOUSE IN ATLANTIC AREA:

At the Government-Industry meeting of the Japanese Export Trade Promotion Council held in early November 1961, the Japanese frozen tuna industry submitted a proposal to establish a warehouse (cold-storage cooperative) at Ghana, West Africa, which would be used to regulate the flow of frozen tuna in the Atlantic Ocean area to stabilize market conditions.

This proposal is not new and was originally made in May 1961. At that time, the catch of Atlantic Ocean tuna had been expected to surpass the 1960 high catch. To prevent a disruption in the European tuna market, as had happened in the past, tuna vessel operators had urged the establishment of a warehouse in the Atlantic, and some fishing companies strongly urged that they be permitted to use the fishing base being built at Monrovia, Liberia, by a large Japanese fishing company. The catch in 1961 fell way below expectations and interest in the warehouse plan died down.

Specifically, the tuna industry wants to establish a warehouse to: (1) separate catches according to countries of destination; (2) carry out quality control whereby rejected fish would be shipped back to Japan; (3) regulate the flow of tuna to control market prices. Eventually, fish canning and fish ham-sausage manufacturing plants would be established at the warehouse site. The warehouse center would operate as a multiple enterprise and handle the catch of the Japanese Atlantic

trawl fleet as well. The tuna industry wants the Japanese Government to finance this project. However, Government authorities are insisting that before this plan can be implemented, the tuna industry should submit a concrete detailed proposal.

As far as the joint use of the large Japanese fishing company's base at Monrovia is concerned, the firm reportedly has no objection to other Japanese fishing firms utilizing its fishing base, which is expected to be completed in mid-1962. This base, which is being jointly financed by the large Japanese firm and the Nigerian Government, will have a 2,000-ton capacity cold-storage plant. (Suisan Keizai Shimbun, November 22, 1961.)

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#### STUDIES ON DISCOVERING "GREEN MEAT" TUNA ABOARD THE VESSEL:

The Japanese have been studying means of determining aboard the vessel what type of tuna will show up as "green meat" tuna after it is processed for canning.

For yellowfin, the studies reveal that it is impossible to tell whether green meat is related to the color of meat before processing aboard the vessel. Fish weighing 66-88 pounds were found to be free from the occurrence of green tuna. There was no connection between occurrence of green tuna and area of capture for that size fish. Fish weighing more than 111 pounds and some of that size caught in the Caribbean Sea were found to include fish with green meat. Whether or not the tuna processed for canning is fresh or frozen does not seem to make any difference as far as the occurrence of green meat is concerned.

For albacore, generally speaking, fish weighing around 44 pounds were free from green tuna but that was not true of the smaller fish. No green meat developed in the albacore caught in the Caribbean Sea, but unless handled properly it was learned that dark-colored meat might develop. Fish caught near 40° north and south latitudes were quite variable in quality and color.

Generally speaking, green meat developed in big-eyed tuna. For Australian tuna, most medium fish developed a meat of dark color, but since the quantity studied was small it was difficult to draw any conclusions. (Suisan Keizai Shimbun, December 6, 1961.)

\* \* \* \* \*



Japan (Contd.):

**CANNED TUNA PACK, 1960:**

Of the almost 6.0 million standard cases of tuna products canned in Japan, almost 3.3 million cases were tuna canned in brine or oil, and the balance was specialty tuna prod-

Japanese Pack of Canned Tuna, 1960	
Product	Std. Cases (48 7-oz. Cans)
Tuna (other than skipjack) in brine . . . . .	1,643,188
" " " " in oil . . . . .	410,991
Skipjack in brine . . . . .	473,501
" in oil . . . . .	761,375
Total in brine or oil . . . . .	3,289,055
Tuna (other than skipjack), seasoned . . . . .	378,223
" " " " flake . . . . .	1,137,109
" " " " cooked with vegetables . . . . .	43,311
" " " " in jelly . . . . .	34,635
" " " " in seasoning . . . . .	55,544
" " " " in tomato sauce . . . . .	60,892
" " " " stewed . . . . .	39,466
" " " " cooked with curry . . . . .	65,440
" " " " cooked with soy sauce . . . . .	18,872
Tuna, other products . . . . .	1,342
Skipjack, seasoned . . . . .	175,595
" " flake . . . . .	360,168
" in jelly . . . . .	42,302
" broiled . . . . .	2
" cooked with vegetables . . . . .	203,558
" in tomato sauce . . . . .	15
" other forms . . . . .	49,116
Total specialty products . . . . .	2,665,590
Grand Total . . . . .	5,954,645

ucts. Of the almost 3.3 million cases packed in brine or oil, 2.1 million cases were packed in brine and almost 1.2 million cases packed in oil.

Note: See Commercial Fisheries Review, December 1961 p. 73.

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**EXPORTS OF CANNED FISHERY PRODUCTS, JANUARY-JUNE 1961:**

Exports of canned fishery products during the first six months of 1961 were somewhat

lower than those for the same period in 1960. The decline was general among most of the important products, including canned tuna, crab meat, mackerel-pike, sardines, and salmon.

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**CANNED MACKEREL EXPORTS AND SUPPLY, APRIL-NOVEMBER 1961:**

A total of 612,000 cases of canned jack mackerel (actual number of cases) were approved for export between April and November 1961, according to data compiled by the



Fig. 1 - Miyako, Iwate Prefecture, considered Japan's leading mackerel port. Here the boats, flying colorful pennants, are assembled ready for the opening of the new mackerel season, generally in September.

Japan Export Canned Jack Mackerel Producers Association. Exports to Singapore and West Africa made up over two-thirds of the total exports. Supply of canned jack mackerel as of November 25 totaled slightly over 93,000 actual cases. (Suisan Tsushin, December 1, 1961.)

Japanese Canned Fishery Products Exports, January-June 1961 and 1960

Product	Jan.-June 1961				Jan.-June 1960
	To U.S.	To Canada	Other Countries	Total	Total
..... (Actual Cases) .....					
Crab meat . . . . .	44,183	1,550	62,336	108,069	127,490
Tuna:					
in oil . . . . .	-	105,178	550,346	655,524	711,014
" brine . . . . .	997,308	-	-	997,308	1,025,009
other types . . . . .	-	4,683	74,352	79,035	40,877
Mackerel-pike . . . . .	6,513	80	114,698	121,291	647,034
Sardine . . . . .	350	-	121,053	121,403	385,654
Horse-mackerel . . . . .	45	-	233,416	233,461	156,469
Salmon, trout . . . . .	12,961	111	283,277	296,349	453,695
Other fish . . . . .	3,266	313	250,580	254,159	166,180
Shellfish . . . . .	160,840	33,045	36,046	229,931	188,474
Other aquatic products . . . . .	2,751	113	1,341	4,205	2,643
Total . . . . .	1,228,217	145,073	1,787,445	3,160,735	3,904,539



## Japan (Contd.):

Destination	No. Cases
Singapore . . . . .	237,068
West Africa . . . . .	178,875
Indo-China . . . . .	36,265
Ceylon . . . . .	34,802
New Guinea . . . . .	20,309
Borneo . . . . .	20,148
Middle East . . . . .	11,506
Hong Kong . . . . .	8,956
Other . . . . .	64,160
Total . . . . .	612,089



Fig. 2 - Aboard a Japanese mackerel fishing vessel fishermen are packing the fish in baskets for stowing in the hold.

Japanese Can Size	Equivalent U.S. Can Size	No. Cases Exported (4/1-11/25)	No. Cases on Hand (As of Nov. 25)
<b>In tomato sauce:</b>			
No. 1 oval	1-lb. oval 48's	107,746.5	10,928.5
No. 3 oval	½-lb. oval 96's	98,469	2,109
No. 1 small	5-oz. tall 100's	268,441	29,206.5
No. 4	1-lb. tall 48's	57,478	19,639.5
No. 6		7,326.5	25.5
<b>Natural:</b>			
No. 3 oval	½-lb. oval 96's	1,423.5	2,964
No. 2 flat	8-oz. oblong 48's	0	69
No. 1 small	5-oz. tall 100's	34,745	22,143
No. 4	1-lb. tall 48's	36,459	6,722
Total		612,088.5	93,807

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### SARDINE INDUSTRY:

Japan's fishery for "Iwashi" (sardine, anchovy, and pilchard) is conducted practically the year-round for one or another of those species of fish.

The canning season for sardines is from August to October; anchovies, January to March; pilchards from April to July followed by a second season from October to December.

The annual case pack of sardines for the past five years is: 1956 - 6,000; 1957 - 9,000; 1958 - 12,000; 1959 - 45,000; 1960 - 18,000 cases. The drop in pack from 1959 to 1960 was caused by the short supply of fish in waters off the coast of Japan. The pack of sardines in 1961 totaled 50,000 cases.

Sardines, which include small pilchards, are packed in cottonseed oil in dingley or quarter cans. They are marketed for domestic use only. The only exports during the last five years occurred in 1956 when 1,000 cases were shipped to Hong Kong.

The 1961 "Iwashi" pack other than those packed in dingley cans was made up of large pilchards and anchovies packed in tomato sauce. Pilchard production totaled 622,300 cases of which 240,000 cases were packed in 15-ounce ovals (48 cans per case); 220,000 cases in 7½-ounce ovals (96 cans per case); 147,000 cases in 5-ounce flats (100 cans per case); 7,500 cases in 15-ounce tall (48 cans per case); and 7,800 cases in 8-ounce oblongs (96 cans per case). The entire pack of anchovies which amounted to 4,500 cases was packed in 7½-ounce ovals (96 cans per case).

The number of cases of sardines that Japan could have produced annually for the past five years under full-scale activities is estimated at 1,000,000. This estimate is based on two important factors: (1) that the fish would have been plentiful supply; and (2) that a strong market demand would have existed for the canned product.

The Japan Canned Sardine Cannery Association states that there are approximately 100 plants in Japan canning sardines. The average wage per worker per month is dependent on the size of the plant in which employed. In small plants (less than 30 employees) the average wage per month is US\$30. In medium size plants (30 to 99 employees) the average wage per month is \$27. In large plants (100 to 150 employees) \$25 a month.

In 1961 ex-vessel prices averaged \$69 per metric ton for pilchards and \$52 per metric ton for anchovies.

The number of sardines packed in dingley-type cans is 14 to 15. No packs of 4 to 5 or 6 to 8 count fish are made. Prices as of mid-December 1961 were: sardines (dingley cans, 100 cans per case, key or keyless) f.o.b. Japan \$35. (United States Embassy, Tokyo, Decembr 12, 1961.)

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### CANNED SARDINE EXPORTS:

Japan's sardine exports for April 1, 1961, to August 31, 1961, totaled 270,520 cases. These consisted of 268,340 cases of pilchards and 2,180 cases of anchovies. Both species were packed in tomato sauce: pilchards packed in 15-ounce and 7½-ounce ovals, 5-ounce flats, 15-ounce tall, and 8-ounce oblongs; and anchovies packed in 7½-ounce ovals.

Shipments to the Philippines totaled 117,834 cases or 43.6 percent of the total exports. Exports (in number of cases) to other areas were: Belgium, 41,432; other European countries 4,076; Middle and Near East, 1,339; West Africa, 42,097; other African countries, 5; Ceylon, 50; Burma, 15,987; Singapore and Malaya, 5,166; Hong Kong, 5,279; Indonesia, 13,674; Central and South America, 11,141; other countries 12,440.

During the Japanese fiscal year of 1960 (April 1, 1960-March 31, 1961), 463,561 cases



## Japan (Contd.):

of canned sardines were exported, of which 462,613 cases were pilchards and 948 cases were anchovies. A total of 285,059 cases or 61.5 percent were consigned to the Philippines and 178,502 cases to the other countries mentioned in preceding paragraph.

There were no exports of pilchards or anchovies to the United States in 1960 or 1961. (United States Embassy, Tokyo, December 26, 1961.)

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#### CANNING OPERATIONS OF LARGE FISHING COMPANIES EXPAND THROUGH TIE-UPS WITH SMALL PACKERS:

The large Japanese fishing firms are reportedly pushing forward plans to tie up with medium and small packing companies having daily production capacities of between 500 and 1,500 cases. They would supply the small packers with raw material on a year-round basis, which would be packed under their own brands and sold through their extensive sales network. This arrangement, which amounts to packing on a commission basis, would permit major fishing companies to increase the variety of canned food packed under their own labels, reduce brand competition, and establish new sales channels and markets for their products.

Consignment of production poses the problem of pack uniformity and quality control. This reportedly is not a problem at the present time since the production of one kind of product is consigned to only one packer.

Annual domestic consumption of all types of canned food in Japan has risen rapidly in recent years, from 10 million cases in 1955 to 30 million cases in 1957, 40 million cases in 1959, and 50 million cases in 1961. Despite this increase in canned food consumption, the small Japanese packing companies have not fared too well due to increased production cost, the seasonal nature of their operations, lack of sales outlet, and inability to conduct market research. The large fishing companies have now stepped into this picture, providing financial assistance in some cases, and have made arrangements with these small packers for them to pack on a consignment basis, making it possible for these small packers to operate on a year-round basis. This trend, which developed

two years ago, is reported to have greatly accelerated in 1961. (Nippon Suisan Shimbun, November 24, 1961.)

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#### TRAWLING OPERATIONS OFF WEST AFRICA:

A Japanese fishing company plans to operate a trawler of 1,500 tons gross in the Atlantic Ocean off the coast of West Africa from September 1962 to March 1965. This trawler, which is being constructed to replace the company's No. 1 Seiju Maru (600 gross tons), presently operating in the Atlantic Ocean, is scheduled to be dispatched to the Atlantic Ocean after its completion in May 1962. Las Palmas, Canary Island; Genoa and Livorno in Italy; and Gibraltar have been tentatively designated as ports where this trawler can land its catches. (Shin Suisan Shimbun Sokuho, November 16, 1961.)

Translator's Note: Of the four ports mentioned above, Genoa has a cold-storage plant of 3,000-ton capacity, and Livorno and Las Palmas each have cold-storage plants of 2,000-ton capacity.

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#### PLAN TO SURVEY EAST AFRICA FISHERIES:

The Japanese Overseas Fisheries Cooperative Society intends to carry out a fishery investigation in Kenya, Uganda, Tanganyika, and Zanzibar. The aim is to study the possibility of joint commercial fishery enterprises. A team of six members will spend about 40 days in those countries with expenses paid, in part, by the Japanese Government. (Fisheries Economic News, October 6, 1961; Suisan Tsushin, October 7, 1961; Suisan Keizai Shimbun, November 9, 1961.)

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#### FISHERIES AGENCY PERMITS TRAWLING SOUTH OF ALASKA PENINSULA:

On December 22, 1961, the Japanese Fisheries Agency informally notified two large Japanese fishing companies of its intention of letting them operate trawl fleets south of the Alaska Peninsula this winter (principally during January, February, and March), according to Suisan Keizai Shimbun, December 23. The Agency had earlier indicated that it would likely permit the two companies to operate trawl fleets in the eastern Bering Sea this winter, and one of the firms had gone



## Japan (Contd.):

ahead and readied the fleet consisting of the mothership Chichibu Maru (5,500 gross tons) and six 250-ton trawlers. All of the trawlers are fitted with steam pipes around the hull to de-ice it during winter operations. According to Hokkai Suisan of December 25, this mothership fleet was expected to depart Hakodate, Hokkaido, on December 28 and remain on the fishing grounds until March 1962. It was expected to operate in the eastern Bering Sea and in the North Pacific Ocean south of the Aleutian Islands and the Alaska Peninsula. At the invitation of the Japanese Government, a U. S. Bureau of Commercial Fisheries biologist is accompanying the fleet to observe operations and to make scientific studies.



Typical Japanese trawler fishing for bottomfish in the Bering Sea and the North Pacific.

The other fishing company was reported to be planning on sending in February 1962 the freezer ship Eiyo Maru (3,000 gross tons) to the eastern Bering Sea accompanied by one 1,500-ton trawler and two 250-ton trawlers, according to Suisan Tsushin, December 21. It is authorized to fish in the North Pacific Ocean west of 145° W. longitude and north of 50° N. latitude. A Canadian biologist was expected to accompany this fleet.

The Suisan Keizai Shimbun states that the following restrictions are being placed on the winter trawling operations:

- (1) Only mothership-type operations will be permitted. Motherships must be over 3,000 gross tons.
- (2) Use of large trawlers will be prohibited.
- (3) Halibut, salmon, king crab, and young herring must not be taken. Catch of salmon and halibut is prohibited east of 175° W.

longitude. Fishing for king crab is prohibited. When any of these species are incidentally caught, they are to be released immediately. Herring under 21 centimeters (8.3 inches) fork length shall not exceed 10 percent of total herring catch per trip.

(4) Long-line gear will be prohibited so as to prevent the taking of halibut.

(5) Operations in the Bering Sea and south of the Alaska Peninsula will be restricted to the waters east of 170° E. longitude. Area includes Bering Sea and waters of North Pacific west of 145° W. longitude and north of 50° N. latitude, exclusive of area of Tokai Maru crab operations north of Alaska peninsula.

The Japanese Government has informed the United States Government that these operations are experimental in nature. In addition, the Japanese Government has assured the United States that any salmon or halibut caught will be returned to the sea; and that Japanese Government inspectors accompanying the fleets will require them to move out of areas in which salmon or halibut are found intermingled with other species of fish.

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#### NEW FREEZER FACTORYSHIP FOR EASTERN BERING SEA BOTTOMFISH FISHERY:

The newly-constructed freezer factoryship Chichibu Maru (5,500 gross tons) was delivered to a Japanese fishing company at Kobe on December 13, 1961. This factoryship was scheduled to depart for the eastern Bering Sea from Hakodate around December 28, and was to be accompanied by six new 250-ton trawlers. Chichibu Maru's specifications are as follows: total length, 133.2 meters (436.9 feet); beam, 18 meters (59 feet); draft, 7 meters (23feet); gross tonnage, 5,500 metric tons; cruising speed, 13.5 knots; maximum speed, 15.8 knots; and freezing capacity, 185 metric tons per day.

The Bering Sea forerunner of the fleet sailed on November 10, 1961, from its base at Kurihama near Yokosuka for the fishing grounds around the Pribilof Islands. The next vessel sailed on November 11. The forerunner that served as scout for the main fleet was the No. 50 Akebono Maru (1,500-ton trawler).



## Japan (Contd.):

Apart from the main fleet, the No. 50 Akebono Maru was expected to engage in general exploratory work and trawling operations around the Pribilofs for some 50 days, and return to Japan late in January with an expected cargo of about 900 metric tons of pollock, rockfish, and cod. (Suisan Keizai Shimbun, December 14, 1961, and other periodicals.)

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#### BERING SEA BOTTOMFISH FISHERY DEVELOPMENTS:

Eleven Japanese fishing firms which operated bottomfish fishing fleets in the Bering Sea in 1961 have formally formed the Northern Waters Bottom Fish Mothership Association.



Fig. 1 - Washing silt and dirt from catch aboard a Japanese bottomfish fishery factoryship operating in the Bering Sea. Man at right is pushing fish onto conveyor belt leading into cleaning and washing compartment.

The Bottom Fish Association will primarily serve in a liaison capacity and submit petitions to the Government on matters relating to the Northern Waters bottomfish fishery which the Association considers to be of mutual interest to its members.

In early December 1961, the Japanese Fishery Agency submitted a request to the Association that it voluntarily reduce by 30 percent in 1962 the numbers of fleets engaged in bottomfish fishing in the Bering Sea. In 1961 a total of 33 fleets operated. It was suggested to the industry that the fishing companies operating more than two fleets cut down their fleets to their 1960 level of

operations and that the remaining companies not increase their operations beyond their 1961 level. Up to 1960, bottomfish fishing in the Bering Sea was carried out by 12 fleets--5 fish meal factoryships, 4 fleets in the Olyn-torsk area, and 3 flounder fishing fleets.

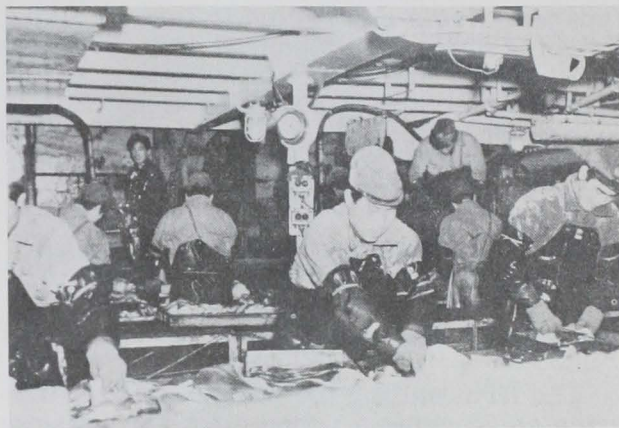


Fig. 2 - Cleaning and packing compartment aboard a Japanese bottomfish factoryship in the Bering Sea.

The Association recognizes the necessity of reducing the number of fleets operating in the Bering Sea. It was suggested that the 1962 operations be limited to 24 fleets, a reduction of 9 fleets, but the Association members have not yet been able to agree on how to effect this reduction, and apparently have requested the Agency's assistance. The Agency was expected to announce its decision in early January 1962. (Suisan Keizai Shimbun, December 9 & 19, 1961; Nippon Suisan Shimbun, November 29, 1961.)

\* \* \* \* \*

#### SABLEFISH FISHING IN BERING SEA:

Japanese fishing for sablefish or silver cod in northern seas to supplement poor halibut fishing the latter part of 1961 yielded a catch of 2,600 metric tons--more than expected. Some 250 tons were expected to be exported to the United States.

The export was tried for the first time in 1961 and exporting companies have made strenuous efforts to develop a market. Contracts for more than half the amount earmarked for export to the United States had been signed as of mid-November 1961.

The two companies exporting the fish have had difficulties in obtaining 7-8 pound fish in-



## Japan (Contd.):

dividually frozen--the type needed for export. Most of the sablefish in northern waters, however, weigh 3-6 pounds each. Individually freezing fish aboard a Japanese mothership is not adaptable to the processing and preservation methods used. While one of the Japanese firms contracted to furnish fish weighing more than 5 pounds each in blocks of 27 pounds, the other of the two firms decided on individually freezing all its fish weighing 5 pounds each in anticipation of future sales. For both companies, sablefish exports are on a trial basis.

As the sablefish are used for smoking, the large oily fish are preferred. Fish suitable for export made up only 10 percent of the entire catch of sablefish.

The firm selling the blocks reports the price as 22 cents a pound c.&f. for fish more than 5 pounds each. The other firm's price for individually-frozen fish is 20-24 cents a pound. In addition to the two firms that are exporting fish frozen aboard their motherships, a third Japanese firm was planning to export to the United States about 100 tons of sablefish landed in Japan. A fourth firm was reported to have stopped exports of sablefish. (Suisan Keizai Shimbun, November 18, 1961.)

\* \* \* \* \*

BERING SEA HERRING  
CATCH LIMIT CONTEMPLATED:

Some members of the Northern Waters Bottom Fish Mothership Association, composed of the 11 companies which operated fleets for bottomfish fishing in the Bering Sea in 1961, are reported to favor the estab-

lishment of catch restrictions for herring in 1962 in that area. Catch of herring in the Bering Sea in 1961 was far above expectations, totaling 72,260 metric tons, with 55,000 metric tons frozen. Supply thus far has far exceeded demand and, as of November 20, 1961, members of the Association are reported to have a total of 19,670 metric tons of frozen herring in stock, and the herring market is described as soft.

Opinions are being expressed that the catch of herring in the Bering Sea should be limited to 35,000 to 40,000 metric tons in 1962 and that the Fisheries Agency may possibly set a herring catch limit, in addition to placing a restriction on the number of fleets which will be permitted to operate in the Bering Sea in 1962. (Suisan Tsushin, December 16, 1961.)

\* \* \* \* \*

BRISTOL BAY KING CRAB OPERATIONS:

The Japanese Fishery Agency announced that it will permit two king crab factoryships to operate in Bristol Bay in 1962, instead of one as in years past. Two fishing firms will be allowed to operate one factoryship and two other firms the second factoryship. The production quota for these two fleets will be 60,000 cases and 70,000 cases of canned crab meat, respectively. Previously, the Japanese operated only one king crab factoryship (Tokei Maru)--operated jointly by three fishing companies. Tokei Maru's production quota in 1961 was 80,000 cases of canned crab meat.

Two large Japanese fishing companies, which have been authorized by the Fisheries Agency to jointly operate one king crab fac-

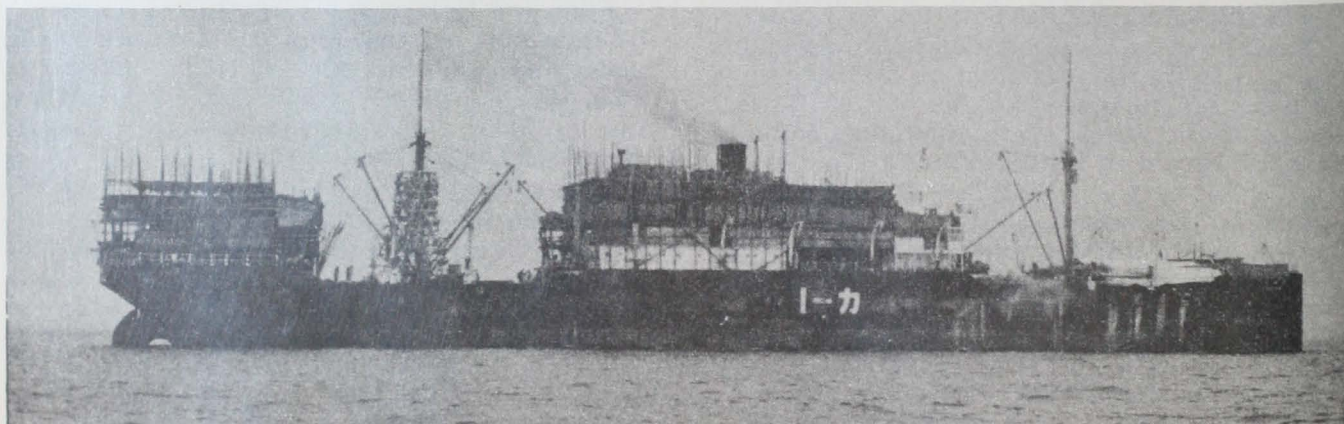


Fig. 1 - Tokei Maru, Japanese king crab factoryship operated jointly by three fishing companies in 1961 in Bristol Bay.



## Japan (Contd.):

toryship in Bristol Bay in the spring of 1962 (production quota--70,000 cases), are reported to be negotiating with another fishing company to purchase that company's king crab factoryship, Shiraneyama Maru (5,700 gross tons). The company selling the Shiraneyama Maru plans to replace it with the freighter Seiyo Maru (6,000 gross tons) which it would convert for king crab fishing in the Sea of Okhotsk. The Seiyo Maru is presently employed in transporting fish meal.

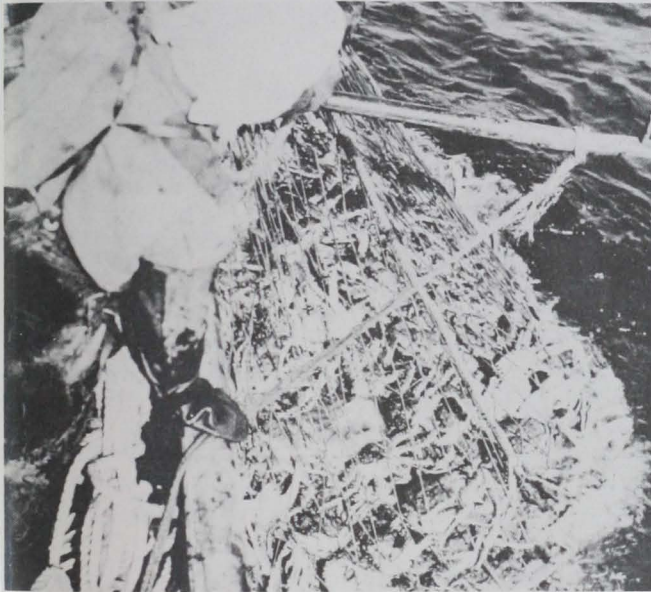


Fig. 2 - A net load of crabs being hauled aboard a Japanese crab fishing vessel.

The other two fishing companies authorized to operate in Bristol Bay are planning to jointly operate the king-crab factoryship Tokei Maru in Bristol Bay in 1962. These two companies have been allocated a quota of 60,000 cases of king crab.



Fig. 3 - A large catch of crabs on the deck of a Japanese king crab mothership.

Separate from the factoryships, one Japanese fishing company will be permitted to continue operating the king crab freezer ship Shinyo Maru (5,630 gross tons) with a new catch quota of 300 metric tons. This represents an increase in the catch quota of 100 metric tons over that previously allocated to the company operating the freezer ship.

The Fishery Agency has not yet clarified its intentions regarding 1962 fall king crab fishing. However, fall king crab fishing is expected to be curtailed to some extent due to increases in catch and production quotas granted for the 1962 spring king crab operations. In the fall of 1961, the Agency permitted three 1,500-ton freezer ships with a total catch target of 700 metric tons to operate in the eastern Bering Sea. In 1962, the Agency is expected to reduce the fall king crab catch quota by 300 tons to a total of 400 tons. (Suisan Keizai Shimbun, December 22, 1961.)

\* \* \* \* \*

#### FISH MEAL INDUSTRY STUDY PLANNED:

Reports indicate that the Japanese Fisheries Agency has decided to undertake a study of the Japanese fish meal industry to be completed by March 1962. This decision appears to have been made following continued increases in the export price of Peruvian fish meal, of which Japan imports close to 30,000 metric tons annually.

Japan imported 28,700 metric tons of Peruvian fish meal in FY 1960 (April 1, 1960-March 31, 1961). As of mid-November 1961, Japan has already imported 15,000 metric tons of Peruvian fish meal, and, depending on domestic production in the fall of 1961, it was possible that another 5,000 tons would be imported at \$120 per ton c.i.f. This price is about the same as that of domestic fish meal. The Fisheries Agency believes that it would be to Japan's advantage to increase its domestic production of fish meal, which is higher in quality than the Peruvian product. (Suisan Keizai Shimbun, November 16, 1961.)

\* \* \* \* \*

#### FISH MEAL FACTORYSHIP PRODUCTION OFF ANGOLA:

The Japanese fish meal factoryship Ren-shin Maru, 14,094 gross tons, operated by a Japanese fishery firm which commenced operations off the Angolan coast on December 1, 1961, was reported to be producing a little



## Japan (Contd.):

over 100 metric tons of fish meal per day as of mid-December 1961. Under arrangements worked out between Angola and Japan, Angolan fishermen deliver their sardine catches to the Japanese factoryship. These deliveries were running 500 to 600 metric tons per day.

The Renshin Maru was scheduled to remain on the fishing grounds off Angola until early February 1962, by which time she hoped to produce 7,300 metric tons of fish meal, of which 2,300 metric tons were to be turned over to Angola.

The two Japanese 120-ton trawlers, Koshin Maru, Nos. 1 and 2, assigned to the Renshin Maru, conducted exploratory fishing off Angola. Reportedly, the two vessels have taken large quantities of sea bream and squid but very little shrimp. (Suisan Tsushin, December 15, 1961, and miscellaneous publications.)

Note: See Commercial Fisheries Review, January 1962 p. November 1961 p. 56, October 1961 p. 67.

\* \* \* \* \*

## OCTOPUS LANDINGS:

Japan's landings of octopus in 1960 totaled 57,601 metric tons. Landings January-August 1961 amounted to 34,081 metric tons. The 1960 average f.o.b. price for frozen octopus was 9.8 U.S. cents a pound. Average monthly f.o.b. prices for 1961 per pound: January, 10.2¢; February, 9.1¢; March, 11.0¢; April, 12.6¢; May, 11.2¢; June, 11.8¢; July, 18.8¢; August, 15.4¢.

日本

## Liberia

## JAPANESE-ITALIAN FISH PLANT FOR LIBERIA:

A joint Japanese-Italian company has completed plans for a \$400,000 fish processing and freezing plant with a daily freezing capacity of 20 tons and storage capacity of 2,000 tons. Bids will be invited shortly for construction along the north breakwater of the Free Port of Monrovia. Completion is expected by mid-1963. (United States Embassy, Monrovia, October 27, 1961.)



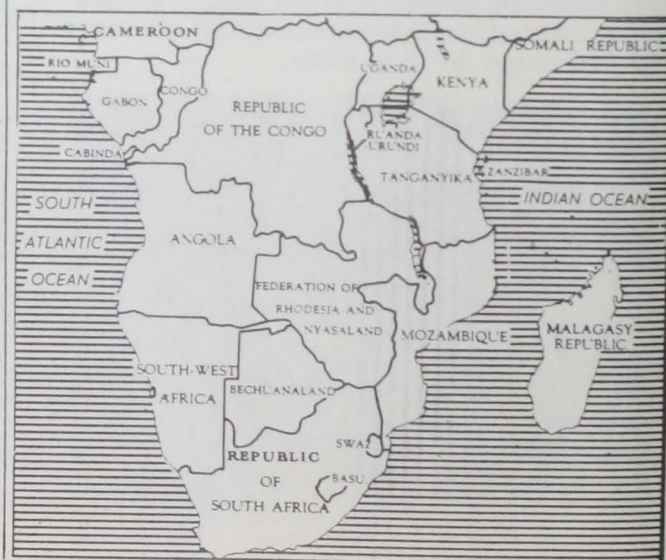
## Malagasy Republic

## EXPLORATORY FISHING FOR TUNA:

In July, August, and October 1961 the Maran Atha, research vessel of "Centre d'Océanographie et des Pêches" (Center of Oceanography and Fisheries of Nossi-Be sailed to the Majunga region (off the northwest coast of Malagasy) to test tuna fishing with Japanese long-lines in the Mozambique channel. These studies undertaken by the "Centre" at Nossi-Be for several years are carried out under



Fig. 1 - Maran Atha, research vessel of Centre d'Océanographie et des Pêches. Used Japanese long-lines to explore for tuna off northwest coast of Malagasy.





## Malagasy Republic (Contd.):



Fig. 2 - Two species of tuna caught by the research vessel Maran Atha with Japanese long lines.

the aegis of the "Office de la Recherche Scientifique et Technique d'Outre-Mer" (Office of Overseas Scientific and Technical Research.

Tests first were carried out with trial gear in order to be able to assess the results immediately. A longline 4 kilometers (2.5 miles) long was used; it had 160 hooks. The line was hauled on board manually. The long line was anchored as close to the port as possible, i.e. somewhat beyond the continental shelf, about 50 km. (31 miles) from the shore.



Fig. 3 - Thresher shark (Alopias pelagicus) caught by the Maran Atha with long lines.

The average daily catch noted at 25 positions of the long line was 215 kg. (473 pounds) of tuna and 250 kg. (550 pounds) of shark. The maximum yield of tuna at one point of the fishing line was 491 kg. (1,080 pounds), the minimum yield 47 kg. (103 pounds).

In the region of Nossi-Be, the "Centre" has been setting up long lines regularly since August 1960. Exploratory fishing by boats of 6, 10, and 14 meters (20, 33, and 46 feet) achieved yields similar to those observed at Majunga. Thus, it is evident that for future commercial utilization, tuna is available all year round in the offshore waters of Malagasy.



Fig. 4 - Mako shark (Isurus oxyrinchus) caught by the Maran Atha with long lines.

Following these studies, a small fishing enterprise at Nossi-Be started using a drifting long line for tuna fishing. The advantage of using a drifting line is that it is very simple and no special equipment is needed. The Malagasy and Comorian seamen aboard the Maran Atha had no trouble whatsoever with the long line. However, considering the short distances between fishing areas, fishing could be easily carried out with small boats since it would not be necessary to hold the catch aboard for more than 24 hours.

The studies off Majunga were expected to continue in order to verify the results obtained.



### Malagasy Republic (Contd.):

If the results are conclusive, a fishery co-operative could be established as a pilot operation. A long line of 7.5 to 9.3 miles will be fished daily and the average daily catch is expected to be 1,100 pounds of tuna. The tuna would be canned and the sharks reduced to fish meal.

--A. Crosnier and P. Fourmanoir



## Malaya

### FIRM HOPES TO EXPORT CANNED TUNA TO UNITED STATES:

A joint Malayan-Japanese tuna canning firm established by Japan two years ago at Penang, Malaya, is reported to have informally sought the Japanese Fisheries Agency's approval to pack tuna in brine for export to the United States. The company presently packs only canned tuna in oil for export to Europe.

The Japan Export Canned Tuna Producers Association violently opposed the establishment of the Malayan company because it feared that the company would eventually begin to pack tuna for export to the United States. The Canned Tuna Association can be expected to oppose any such move on the part of the Malayan firm, which claims that the report is unfounded. (Suisan Tsushin, November 15, 1961.)



## Mexico

### FISHERY ADVISORY COMMISSION CREATED:

A fishery advisory commission was established in Mexico by Presidential Decree (Diario Oficial, December 16, 1961) and, according to press reports, Ex-President Abelardo Rodriguez has been appointed president of the commission.

The duties of the National Fishery Consultative Commission (Comision Nacional Consultiva de Pesca) are strictly advisory and all administrative actions pertaining to fisheries remain with the Ministry of Industry and Commerce.

The Commission consists of nine members: a president appointed by the President of Mexico, a Vice-President who shall be the Director of Fisheries, and one representative each from the Ministry of Marine, the Ministry of Treasury and Public Credit, the Ministry of Agriculture and Livestock, the National Bank for Cooperative Development, the National Company for Popular Subsistence, the National Storage Warehouses, and the Bank for Small Commerce.



This fresh-water fish farm, near Mexico City, is one of the numerous projects carried out by the Government to increase food production.

Although the Law of Ministries delegates to the Ministry of Industry and Commerce all matters pertaining to fisheries, during the course of time eight other government agencies have become involved in fisheries in one way or another. A representative of each of these agencies (with the exception of the Ministry of Hydraulic Resources which operates several fresh-water fish hatcheries) has been placed on the Commission. One of the principal functions of the Commission will be to coordinate the activity of the various agencies with respect to fisheries. The Commission will also advise on ways and means of increasing and improving the fisheries and fishing industry of Mexico. (United States Embassy, Mexico, December 20, 1961.)



## Morocco

### SARDINE PRODUCTION AND MARKETING:

Morocco's sardine canning season legally starts on June 1 and ends May 31.

Annual pack of 3 $\frac{1}{4}$ - to 4-ounce dingley-type flat cans, also known as quarter



## Morocco (Contd.):

flats<sup>1/</sup>, in 100-can cases fluctuated from 2,300,000 cases in 1956/57, to 1,800,000 cases in 1957/58, 1,300,000 cases in 1958/59, to 1,900,000 cases in 1959/60 and 2,350,000 cases in 1960/61.

The pack in 1960/61 consisted of all pilchards, packed principally in olive oil, peanut oil, soybean oil, and tomato sauce.

Out of total exports of 1,984,572 cases of pilchards in 1960/61, France received 691,500 cases, Germany 166,200 cases, Italy 124,000 cases, Ghana 106,700 cases, U.S.S.R. 78,600 cases, and Czechoslovakia 68,500 cases.

Morocco's pack June 1, 1961, to May 31, 1962, is expected to amount to 2,350,000 cases.

In Morocco there are 44 sardine-canning plants. The average wage paid to cannery workers is: women 15.5 U. S. cents per hour, men 17.5 cents per hour. Fishermen are paid about US\$77 a metric ton for the fish ex-vessel. The supply of raw fish available to the canners has been variable.

Prices to the canners are fixed by the export association and approved by the Government. Mandatory Government inspection as to quality of fish and pack is under the jurisdiction of the Office Cherifien d'Exportation, a Government agency. (United States Consulate, Casablanca, November 28, 1961.)

<sup>1/</sup>The cans are about 4 inches long, 3 inches wide, and  $\frac{3}{4}$  inch deep.

\* \* \* \* \*

CANNED FISH EXPORT TRENDS:

During the first four months (June-September 1961) of the 1961/1962 packing season, exports of canned fish rose to 1,053,531 cases as compared to 829,265 cases the previous year. Exports by product were: sardines 823,393 cases, tuna 74,795 cases, others 150,343 cases.

Sharp competition has been encountered in foreign markets (except France with a duty-free contingent of 600,000 cases), particularly from Portugal which has lowered its prices. (United States Embassy, Rabat, November 30, 1961.)

**New Zealand**FIRM HOPES TO CAN TUNA:

A New Zealand firm hopes to import Japanese frozen tuna and produce canned tuna, using Japanese canning techniques. The firm, located on Cook Island (west-southwest of Tahiti Island), wants to convert its fruit canning plant at Rarotonga Island (approximate location: 20° south latitude, 160° west longitude, south of Cook Island) for canning tuna. Japanese technicians would be invited to teach canning techniques to that company's cannery staff. For raw material, tuna loins would initially be imported from Japan, later whole frozen tuna.

The same company also plans to purchase fishing vessels to supply fish to its cannery. (Shin Suisan Shimbun Sokuho, November 18, 1961.)

**Nigeria**JAPANESE PLAN TO ESTABLISH FISHING BASE HELD UP OVER FINANCIAL DIFFICULTIES:

The proposed establishment of a joint Nigerian-Japanese fishing base at Lagos, Nigeria, is reported to be running into financial difficulties. The two Japanese firms involved in the plan had hoped to finance the project with 500 million yen (US\$1.4 million), which they would borrow from the Overseas Economic Cooperative Fund, but their plan reportedly has bogged down due to the Cooperative Fund's reluctance to grant the necessary funds. One of the Japanese firms is a large fishing company and the other is a refrigeration equipment manufacturer.

The Overseas Economic Cooperative Fund as well as the Japanese Government are urging the two firms to increase their investments. However, the two firms, while admitting the commercial nature of their plan, feel that their venture would contribute to the promotion of the Japanese Government's policy of adjusting the present one-way export trade with Nigeria, normalize diplomatic relations with that country and, at the same time, would contribute to the development of Nigeria's fishery resources and fishery technology.

Meanwhile, a large United States fish-canning company is said to have indicated to the



## Nigeria (Contd.):

Nigerian Government its desire to "concentrate its effort on fish processing if the Japanese have no intention of entering into this business." However, the Nigerian Government strongly favors conducting joint operations with the Japanese firms for two reasons: (1) to learn advanced Japanese fishing techniques so as to develop Nigeria's marine resources; (2) to reduce Nigerian imports from Japan.

A study made by the World Bank shows that Nigerian consumption of animal protein, is the lowest in the world. To supplement the deficiency of animal protein, Nigeria annually imports US\$28 million worth of dried fish from Norway. For Nigeria, the urgent task now is to acquire fishery techniques with which to develop her marine resources.

The plan to establish a joint fishing base in Nigeria rapidly gained momentum in July 1961 following an inspection tour of Nigeria by a group of Japanese Government officials, who opened negotiations with Nigerian Government leaders. In the course of negotiations, the fishing base plan proposed by the Japanese firms was brought up. The Nigerian Government responded enthusiastically to the plan and subsequently offered to advance 70 percent of the funds required to establish the joint company. Expecting the loan of \$1.4 million from the Overseas Cooperative Fund, the Japanese fishing company has already invested 100 million yen (US\$228,000) to equip fishing vessels and to furnish crews. However, the Japanese Finance Ministry, which approves all overseas investments, is now demanding that two firms either increase their investments or reduce the scope of their proposed fishing base in Nigeria. (Suisan Keizai Shimbun, December 8, 1961.)



## Norway

TUNA FISHING INDUSTRY:

Before 1947, Norwegian fishermen caught some 200 metric tons of bluefin tuna every year with harpoons. In 1948 a few fishermen succeeded in catching tuna with purse seines. In 1949 landings increased to 2,500 tons, more than ten times as much as in the past. Encouraged by their success, a large number of vessel owners went in for purse-seine fishing for tuna which yielded 11,400 tons in 1952.

During four years, 1952-1955, Norway's tuna landings reached a peak of 8,000-10,000 tons per year. In 1956, however, the catch dropped to 4,500 tons. From that date up to 1960 it hovered around 3,000 tons. The number of purse seines fished during the peak year in 1955 was 433. Then the number started to decline gradually and in 1960 shrank one-fifth to 86. In 1960, the 86 purse seines yielded landings of 3,240 tons. Of the purse seines fished, 9 made no catch, 30 fished in the south of Stord and obtained average catches of 56 tons, valued at \$14,560, which was considered fair fishing.

The reason why landings drastically decreased in 1955 was that the fish schools stayed in offshore waters because of unfavorable weather conditions, instead of coming in to bays as they do during a year of abundant catches. Furthermore, tuna schools habitually move at the same speed as the bait fish they are chasing. They move fastest when they are not following their bait and fishing vessels have great difficulties in approaching the moving schools in offshore waters. The fishing season is from July-October. Especially toward the end of a season it is impossible for the fishing vessels to even approach the tuna schools close enough to fish. In the fall, the fish on which they feed become less and tuna go down deep into the water.

The Norwegian purse seine is 350 fathoms long with a mesh of 7.9 inches. A purse seiner has a deck of 60-70 feet and an auxiliary boat with a powerful engine. The seiner uses one other boat to handle the net. The crew of a vessel consists of 10-12 men. (Suisan Keizai Shimbun, November 24, 1961.)

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WITHDRAWS FROM WHALING CONVENTION:

The Norwegian Government on December 29, 1961, served notice of its conditional withdrawal from the International Whaling Convention. The United States Government, as the depository Government of the Convention, was notified accordingly.

The Government decided to withdraw because it had not been possible to ascertain whether the conditions for Norway's continued adherence to the Convention could be fulfilled. These conditions, formulated in September 1960, are: (1) that the Netherlands rejoin the Convention; (2) that the Soviet Union confirm its



Norway (Contd.):

acceptance of 20 percent of the total international whaling quota as its share; and (3) that, within a reasonable time, an agreement be reached on distribution of the remaining 80 percent between Norway, Great Britain, Japan, and the Netherlands. The withdrawal notice will be cancelled if and as soon as an agreement concerning distribution of the international whaling quota is signed by the five whaling nations prior to July 1, 1962.

The primary objective of the Norwegian Government is to attain an arrangement whereby the whale stock can be effectively protected against extinction, thus safeguarding the existence of a viable whaling industry. This could best be achieved by concluding a quota agreement based on recommendations of the whaling conference in London in 1958, while maintaining the Whaling Convention. Towards that end, Norway is prepared to participate in discussions when and where it might suit the other whaling nations, according to the January 11, 1962, issue of News

Denmark do, he said, the joint EEC trade tariff would cause great difficulties. West Germany and Be-Ne-Lux already have raised their tariffs on frozen fish fillets.

The danger facing Norway, he warned, is that the fishing industry in the Common Market, well protected behind high tariff barriers, will expand and make the EEC area far more self-sufficient with fish products. And there are no markets to take the place of the EEC area, he observed. (News of Norway, December 14, 1961.)



Peru

EXPORTS OF MARINE PRODUCTS, JANUARY-SEPTEMBER 1960-61:

Exports of principal marine products by Peru during the first nine months of 1961 were substantially greater than in the same period of 1960. Meal and oil exports were up considerably.

Peruvian Exports of Principal Marine Products

Marine Products	July-Sept, 1961			Jan., -Sept, 1961			Jan., -Sept, 1960		
	Qty.	Value 1/		Qty.	Value 1/		Qty.	Value 1/	
	Metric Tons	Million Soles	US\$ 1,000	Metric Tons	Million Soles	US\$ 1,000	Metric Tons	Million Soles	US\$ 1,000
Fish meal .....	187,104	366.3	13,668	548,158	968.2	36,127	383,600	850.2	30,749
Fish (frozen, canned, etc.) .....	12,699	67.2	2,507	28,490	196.2	7,321	24,862	155.6	5,627
Fish oil .....	21,598	60.8	2,269	76,288	214.7	8,011	23,728	67.9	2,456
Sperm oil .....	3,851	13.7	511	6,435	24.1	899	9,489	32.4	1,172
Fertilizer (guano) .....	1,432	3.6	134	5,308	14.0	522	9,941	24.5	886
Whale meal .....	990	1.3	49	4,097	5.7	213	1,513	2.6	94

1/F. o. b. values converted at rate of 26.8 soles equal US\$1 for 1961 and 27.65 soles equal US\$1 for 1960.

of Norway of the Norwegian information Service.

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FISHERIES MINISTER'S VIEWS ON EEC:

In the opinion of Norway's Fisheries Minister, the fishing industry will likely be seriously affected whether or not Norway decides to join EEC--the European Economic Community. In view of this, he told the annual convention of the Sunnmøre Fishermen's Association, it is rather brash to oppose any link whatsoever with EEC.

The Minister observed that about 50 percent of the fish and fish products exported by Norway now goes to West Europe. If Norway fails to join EEC, while Great Britain and

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CONTROL OF CANNED TUNA SALES TO EUROPE PROPOSED:

Peruvian canning industry representatives met with leading Japanese canned tuna exporters on November 24, 1961, in Tokyo to discuss means of regulating the sale of canned tuna and tuna-like fish in oil to Europe. The Peruvian representatives claimed that Japanese canned tuna in oil and Peruvian canned bonito were competing directly with each other for the European market, and that this price competition had driven down the prices for those products. Japanese exporters apparently have no intention of having the Japanese production of canned tuna for export to Europe, as well as sales, regulated at this time, as proposed by the Peruvian canners,



## Peru (Contd.):

and this meeting is reported to have ended without definite agreement.

The Peruvian representatives later met with Japanese canned tuna packers from the Shizuoka area. They reportedly requested that Japanese canned tuna in oil, which is presently exported to Europe for around \$6.80 a case, be sold for \$7.00 a case f.o.b. Japan. Such a price hike is favored by some Japanese packers. However, it is unlikely that prices can be raised since the packers are not in a position to regulate export prices. (Suisan Tsushin, November 25 and December 6, 1961.)



## Poland

TRAWLERS FISHING OFF GUINEA:

Two Polish lugger trawlers late in 1961 sailed for Guinea to operate with the Polish-Guinean fishing agency. It is anticipated that 10 additional vessels of this type will go to Guinea within a year.

In October 1960, an agreement was signed for the formation of a Polish-Guinean fishing company to begin operations in March 1961. Poland was to supply trawlers; the Guinean Government was to supply a base of operations, with a refrigeration plant, a fish meal plant, and warehouses. About 50 Guinean specialists and fishermen are to be trained in Poland. (The Fishing News, November 10, 1961.)

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FISHING PLANS FOR 1962:

Some details of the plans for Polish commercial fishing in 1962 were revealed in a report about a session of the Sejm Committee on Maritime Economy and Navigation (Trybuna Ludu, December 7, 1961). The fish catch in 1962 is supposed to increase to 139,000 metric tons, six percent higher than in 1961. Since this increase is to be achieved by fishing in "distant waters," fishing enterprises are supposed to receive two more trawlers equipped for some processing. Out of the investments planned for the development of fishing next year, 44 percent reportedly have been allotted for the port of Szezecin.

As a part of the 1962 plans of the fishing industry, a "small" improvement is hoped for in the supply of fish for the domestic market. It was admitted, however, that present motorized refrigeration equipment was barely sufficient for supplying 6,000 tons of fresh sprats to the country's inland markets. To improve this situation, the addition of 16 additional mobile refrigerated units is planned during the current five-year plan.



## Portugal

RULES FOR ASSURING NORMAL SUPPLY OF GELLIDIUM TO AGAR-AGAR INDUSTRY:

Rules designed to assure the Portuguese agar-agar industry a normal supply of gellidium seaweeds were established when the Secretary of State and Commerce issued Ministerial Order No. 18796 in the November 3, 1961, issue of Diario do Governo.

The Order makes it mandatory for gellidium pickers to register all the amounts gathered by them with the semi-official Regulatory Commission of Chemical and Pharmaceutical Products (Comissao Reguladora dos Produtos Quimicos e Farmaceuticos) and requires local exporters, when applying for an export license, to place at the disposal of the local agar-agar industry an unspecified percentage of their inventories in order to assure a year's supply of the qualities of gellidium deemed most appropriate to the industry. The legislative measure also classifies gellidium into three qualities, depending on the gelose content, moisture and impurities, and establishes the respective prices effective until July 1, 1962, at which exporters will have to offer these qualities of gellidium to the industry.

The amounts offered by exporters and not acquired by the industry 15 days after an offer is made, may be freely exported. (United States Embassy, November 21, 1961.)



## Rhodesia and Nyasaland Federation

LAKE KARIBA FISHING INDUSTRY:

By 1964, a minimum annual production of 12,000 metric tons of fish are expected to be



Rhodesia and Nyasaland Federation (Contd.):

produced from Lake Kariba (the world's largest man-made lake) in Rhodesia. In 1960, about 1,000 tons of fish were taken. The total catch will reach 4,000 tons in 1961. Estimates for annual production in 1962 and 1963 are 8,000 tons and 9,000 tons, respectively.

To develop the fishing industry on the Lake, several concessions have been granted. Two concessions, for 10 years each, on the Southern Rhodesian shore will have an annual quota of 1,300 and 700 tons, respectively. A Northern Rhodesian concession, for five years, will have an annual quota of 1,000 metric tons. The remaining annual catch goals will be purchased by the concessionaires from independent fishermen. After two years the concessions will be reviewed, with the Government reserving the right to alter them to conserve and protect the resource.

Sites for cold-storage and ice-manufacturing plants will be made available for private enterprise under five-year concessions. Land will also be available for lease in Northern Rhodesia for fish canning and fish meal manufacture. Five harbors to shelter the fishing fleet are in the process of construction with completion scheduled in 1962.

Eighteen varieties of fish including bream, live in the lake; the bream were introduced. To develop this fishing industry, about 250,000 acres of land were cleared, and 20,000 acres are already submerged. A Fisheries Research Institute will be established at Lake Kariba in 1962. (United States Consulate, Salisbury, November 10, 1961.)



## South Africa Republic

### ONE SPINY LOBSTER AREA DESTROYED BY VOLCANO:

The volcanic eruption late in 1961 resulting in the evacuation of the Island of Tristan Da Cunha in the South Atlantic Ocean also did considerable damage to the spiny lobster industry in that area. Canning and freezing facilities on the Island have been reportedly destroyed beyond repair.

At the start of these operations by five South African companies in 1949, the Coloni-

al Development Corporation invested about \$365,000 in the project. Exploration of the area's spiny lobster resources showed fishing grounds about 45 miles long by about 2 miles wide capable of sustaining an annual yield of over one million pounds. Almost the entire production was shipped to the United States.

It is believed that the operations will be rebuilt as soon as possible. (The Fishing News, December 8, 1961.)



## South-West Africa

### SOUTH-WEST AFRICA PILCHARD-MAASBANKER FISHERY ATTAINS 1961 QUOTA:

By the end of September 1961, the six pilchard processing factories in Walvis Bay, South-West Africa, had taken all but 23,295 tons of the 375,000 short tons of pilchards, maasbanker, and mackerel they were permitted to catch during the 1961 season. Three of the six factories had stopped production on reaching their individual quotas and the last of the remaining three factories were expected to close down early in November.

Walvis Bay has a quota 62,500 tons allocated to each of its six pilchard factories and the South-West Africa Administration imposes no closed season on fishing. It has been found, however, that the best fishing months--with the highest oil yield from prime fat fish--are in the middle of the year, and operations usually extend from March-April through September-October. Most of the catch is pilchards in South-West Africa.

This year, although the permitted total catch was raised from 310,000 tons in 1960 to what will most likely be a permanent 375,000 tons, canned fish packing has been limited to a total lower than the record 4,600,000 cases packed in 1960. An interesting development in 1961 has been a big increase in the pack of the one-pound oval pack to meet a growing demand. In one large factory the oval pack will make up 10,000 tons of the total canned fish pack of just under 25,000 tons. Canned fish was reported to be selling steadily, but the short pack period results in an accumulation of canned fish stocks for sale over the whole year.



### South-West Africa (Contd.):

As the factories close, the plants are stripped down, and machinery, buildings, and boats (most of them privately-owned) receive a thorough overhaul in preparation for the 1962 season.

With the 542,429 short tons of pilchards, maasbanker, and mackerel caught off South Africa's Cape coast and the 351,705 tons taken off Walvis Bay, the South African and South-West African pelagic shoal catch to the end of September totaled 894,134 short tons. (October 1961 issue of The South African Shipping News and Fishing Industry Review.)



### Spain

#### VIGO FISHERIES TRENDS, 1961

Fish Exchange: During October 1961, a total of 10,571 metric tons of fish valued at 72.2 pesetas (US\$1.2 million), passed through the Vigo Exchange. In November this amount decreased to 6,632 tons valued at 57.6 million pesetas (\$1.0 million) because sardine landings dropped from 5,097 tons in October to 2,152 tons in November. Other species which also decreased were anchovy and horse mackerel.

However, the amount of fish handled for the first 11 months of 1961 was 20.5 percent more than in the same period in 1960.

Year	Qty.	Value		Avg. Price (Ex-Vessel)	
		Metric Tons	1,000 Pesetas	US\$ 1,000	Pesetas/Kilo
1961 . . . .	71,972	683,553	11,393	9.49	7.2
1960 . . . .	59,728	604,000	10,067	10.11	7.6

While statistics for December were unavailable, it was expected that the amount of fish handled was lower than for November. But the year's total was expected to surpass totals for the last 30 years. Sardine and horse mackerel landings particularly contributed to this higher 1961 volume.

The first fish-freezing vessel of the Vigo fleet, the Lemos, came into port in early December with a cargo of 240 tons of hake and small hake (pescadilla), the result of a three months' trip in South American waters. The result in the market was not so promising, however, partly because of inadequate distribution facilities, and partly because the local conservative public, accustomed to fresh fish, looked askance at the frozen variety. Prices for the frozen hake dropped from 28 to 25 pesetas per kilo (21.2 to 18.9 U.S. cents a pound) ex-vessel despite the fact that fresh hake sold during the previous three months at an average price of 43 pesetas per kilo (32.5 cents a pound). The frozen fish has been stored until it seems opportune to make another attempt to sell it.

The Andrade, sistership of the Lemos, as of December 1961 was fishing in South African waters. The firm owning the vessels plans to acquire a transport vessel to permit a longer period of time for fishing. It also plans to build other vessels of the same type.

Canning: The activity of the fish canning industry decreased somewhat at the end of November owing to the smaller catches of sardine and greatly reduced landings of tuna (bonito). The lack of sardines in a period when canners were counting on a continued abundance took many canners, with foreign orders pending, by surprise. The decrease in catches (about 50 percent) contributed to the increase in sardine ex-vessel prices at the Vigo Exchange from 3.74 pesetas (2.8 cents a pound) in October to 5.08 pesetas (3.8 cents a pound) in November and presented a problem to packers who quoted canned sardines at competitive prices in the international market. During December, some canners found themselves obliged to buy sardines at any price in order to fill their commitments, and to avoid a total loss of their export market.

Even without considering it an outstanding year for exports, it is believed that 1961 will not fall behind 1960, but considerably under the hopes and plans of exporters who have, despite all, done quite well in the foreign market. The Government measure to grant a fiscal tax deduction for exports has favored sales abroad.

Canners are urging the Government to permit the free import of frozen tuna for canning; at present the duty is 19 percent ad valorem. On obtaining such authorization, it is planned to set up a regular flow of raw fish which will permit canneries to plan their production and sales for several months ahead, without being subject to the hazards impinging on the short and uncertain tuna season in Spain. As a rule, the season lasts from June to October-November, and only a very small number of canners have refrigeration facilities to store a certain amount of fish to provide work in periods of scarcity of fresh fish.

There is talk also of the possible formation of an association of canners to expand the export of canned albacore to the United States. Basically, 65 firms of the Northwest and Cantabrian region of Spain (43 in Galicia) have joined the plan. For the present, it would be limited to albacore and to the United States market, but it is expected to be the base for future associations which would apply to other species and other markets, if the plan works out.

The order (Boletín Oficial of August 26, 1961) which regulates the inspection of Spanish canned fish should have entered in force early in 1962, but it has been postponed for another year in some of its applications. At present there are no means for carrying out this inspection; moreover, the prime objective would be the standardizing of cans which would facilitate the control, and it is this aspect which will not go into effect until 1963. Plans and production methods, machinery, and even outmoded cans do not permit the immediate implementation of the law without hurting the canners. These maintain that control is already carried out by the importing countries, the majority of which have very strict rulings for the admission of food. (United States Consulate, Vigo, January 5, 1962.)

Note: Values converted at rate of 60 pesetas equal US\$1.



### Sweden

#### SWEDEN REFUSES TO ISSUE FLOATING TRAWL PATENT TO DANE:

The long dispute over a Swedish patent on a Danish floating trawl was ended on October 13, 1961, when Swedish authorities dismissed the appeal of Robert Larsen of Skagen, Denmark, from a 1959 decision which refused him a patent for the reason that a patent had been issued four years earlier for a floating



## Sweden (Contd.):

trawl of the same type to Aron and Yngve Bernhardsson of Foto, Sweden.

According to reports in Danish and Swedish fishery trade publications (Dansk Fiskeritidende, November 17, 1961; Vestjysk Fiskeritidende, November 10, 1961), Larsen had contended that his trawl was different because it was regulated by the length of the cables and the speed of the vessel whereas the Swedish trawl was regulated by means of floats. However, the Swedes were able to demonstrate that the two trawls operated on precisely the same principles, thus relieving many users of the Swedish trawl from possible economic claims by Larsen. (Report of December 13, 1961, from Fisheries Attache, United States Embassy, Copenhagen.)



## Taiwan

## JOINT AFRICA-TAIWAN FISHING OPERATIONS:

Fishery cooperation agreements have been made by Taiwan with Malagasy and Liberia. The government-owned China Fisheries Corporation (CFC) is to send experienced fishermen to those countries to provide technical assistance to the local fishing industry. The CFC will also provide tuna to a cannery in Malagasy.

Under discussion is a joint fishing enterprise with Liberia whereby that country would provide shore facilities and the CFC would furnish capital investment in the form of fishing vessels. Also under consideration is an agreement with Sierra Leone for the use of port facilities. (United States Embassy, Taipei, November 7, 1961.)



## U.S.S.R.

## NEW FREEZER FISHING VESSEL:

The freezer vessel Bratsk was constructed for the Soviet fishing fleet by the East Germans in the city of Stralsund. The 2,495-gross-ton ship will carry a crew of 91, cruise at 11 knots, and carry enough fuel to remain at sea for 40 days. Its 2<sup>o</sup> ammonia

refrigeration units can freeze 50 tons of fish every 24 hours and maintain the total hold capacity of 800 tons at minus 18° C. (-0.4° F.). The Bratsk will be incorporated into the Kaliningrad fishing fleet. From Rybnoe Khoziaistvo (Fishing Industry), No. 8, August 1961.

\* \* \* \* \*

## NEW TYPE FACTORYSHIP FOR WHALING AND FISHING:

A whaling mothership (17,000 gross registered tons) valued at approximately DM65 million (\$16.3 million) was launched at the end of November 1961 by the Government-owned shipyard of Kiel, which constructed the ship under a U.S.S.R. order placed in the middle of 1960. In the course of the ceremonies, the wife of the Soviet Ambassador to Bonn named the ship Vladivostok.

The ship represents a new type in the field of whaling and deep-sea fishing and was constructed according to plans based upon the findings of Soviet scientific research. It will serve as whaling mothership and also as a fish cannery. She is equipped with a landing deck for a helicopter which can be used to locate the whales and fish for the smaller boats.

This is the first of two ships of this type and size ordered by the U.S.S.R. in June 1960 for delivery in 1962. A second vessel will be delivered in 1962.

The Japanese were the first to develop a factoryship capable of performing the dual functions of whaling and fishing. The Vladivostok can also produce frozen fish, fish-liver paste, and vitamin-rich fish oils. The vessel has a speed of 14 knots and will be manned by a crew of 408 men. (Le Marin, December 8, 1961; United States Consulate, Bonn, December 15, 1961.)

\* \* \* \* \*

## PROGRESS IN FROZEN FISH PRODUCTION:

In June 1961, the Central Committee of the Communist Party noted the importance of the use of freezing (especially blast-freezing) in the production, storing, and transportation of fish products. U.S.S.R. production of frozen fish products increased from 442,400 metric tons in 1950 to 674,000 tons in 1960; production of salted fish products has declined.



## U. S. S. R. (Contd.):

In 1958, about 31 percent of the fishing fleet was equipped with refrigerated holds, and by 1960 this was increased to 44 percent. The quality of refrigeration has been improved by (1) lowering hold temperatures from 10.4°-14° F. to minus 0.4°-13° F., (2) equipping factoryships with efficient air apparatus for blast freezing, and (3) providing generators to produce ice from sea water. In 1965, according to the Seven Year Plan, 1,230,000 metric tons of fish will be blast-frozen, compared to 540,000 tons in 1960. From Rybnoe Khoziaistvo (Fishing Industry), No. 8, August 1961; FAO Yearbook of Fishery Statistics, 1960.

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SALMON CULTURE SUCCESSFUL:

The Soviets have made significant advances in the culture of chum salmon. The Steplovskii Fish Culture Station of the Amur River Basin in the Far East has substantially increased autumn chum runs from 2,000 to 6,000 spawners before 1928 to 60,000 spawners in 1960.

Marking experiments showed that survival of cultured fish, as indicated by adult returns, was 1 percent as compared to a natural survival of 0.1 percent.

Similarly, two fish-culture stations, established along the Takoe River on Sakhalin Island, have increased annual chum runs from 400 to 40,000 spawners over a 30-year span. Success is believed due to the release of chum salmon one month to two years old. The Soviets stated that significant numbers of artificially-reared chum probably are taken in high-seas catches, particularly by the Japanese. From Rybnoe Khoziaistvo (Fishing Industry), No. 4, April 1961.

\* \* \* \* \*

FISHERY LANDINGS INCREASED IN 1960:

The U. S. S. R. continued its rapid strides in fishery expansion with a 1960 catch of 3,051,000 metric tons of fishery products and about 450,000 tons of whales. In world fishery production, the U. S. S. R. now ranks ahead of the United States, following only Japan, Communist China, and Peru. The Soviet catch has doubled since 1950, mainly because of the addition of many high-seas fishing vessels to its fleet. In 1960, about 78 percent of the U. S. S. R. catch was taken by high-seas vessels, compared with only 34 percent in 1950. A total catch of 4,620,000 tons is planned for 1965.

The Soviet Union's 1960 catch exceeded all expectations. Almost 2,000,000 tons of it found its way to the Soviet consumer's table.

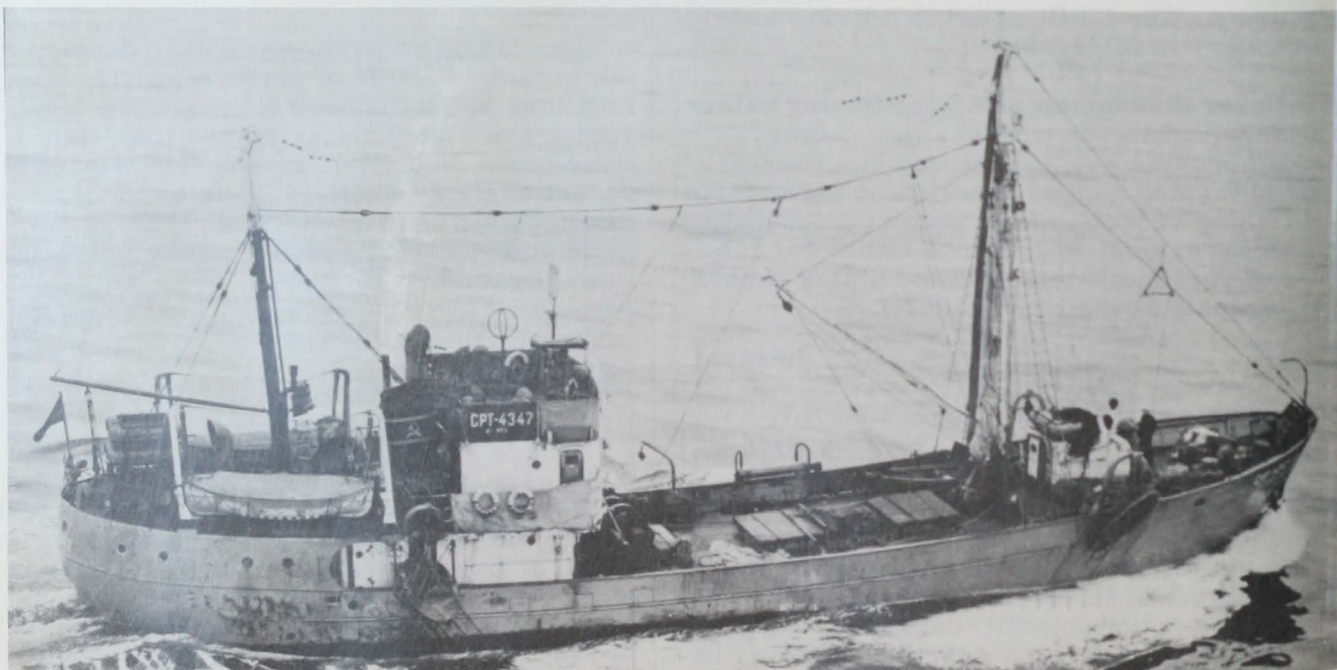


Fig. 1 - Typical Russian trawler fishing in North Pacific and Bering Sea.



U. S. S. R. (Contd.):

U.S.S.R. Fishery Landings by Principal Species, 1959-60		
Species	1960	1959
	. (1,000 Metric Tons) .	
<b>Herring and related species:</b>		
Atlantic herring . . . . .	523.4	464.3
Pacific herring . . . . .	193.0	235.3
Other . . . . .	367.1	356.7
Total . . . . .	1,083.5	1,056.3
<b>Cod and related species:</b>		
North Atlantic species . . . . .	439.8	293.7
Alaska pollock . . . . .	109.2	51.6
Pacific species . . . . .	32.1	28.9
Baltic cod . . . . .	91.4	40.5
Total . . . . .	672.5	414.7
<b>Flounder and related species:</b>		
Pacific Ocean species . . . . .	219.0	191.2
Other . . . . .	22.7	12.6
Total . . . . .	241.7	203.8
<b>Other species:</b>		
Salmon and related species . . .	120.5	142.2
Ocean perch or redfish . . . . .	183.9	243.5
Other marine fish . . . . .	247.9	183.8
King crab and other shellfish . .	37.4	32.8
Marine animals and residue . . .	32.0	13.5
Total marine production . . . . .	2,619.4	2,290.6
Fresh-water fish . . . . .	431.6	465.4
Grand total . . . . .	3,051.0	2,756.0

Sources: Food and Agriculture Organization Yearbook of Fishery Statistics, 1960; *Rybnoe Khoziaistvo* (Fishing Industry), No. 5, May 1961; and *Australian Fisheries Newsletter*, November 1961.

With the exception of the Far East deep-sea fleet, all branches of the industry over-fulfilled their plan. The Black Sea deep-sea fleet's sardine operations off West Africa

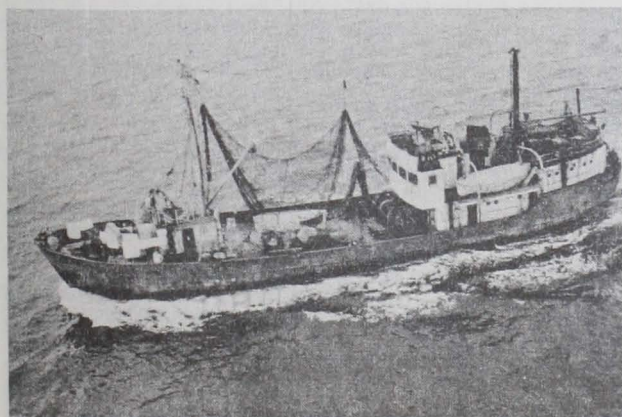


Fig. 2 - Another Russian trawler with nets spread out to dry. Vessel is underway.

were highly successful, and the cod and herring fisheries did extremely well.

The stern-fishing factory-trawler has become the standard deep-sea vessel and the basic design has now been attained in the Leskov class being built in Poland. The dimensions of this latest trawler are: Overall length, 279 ft. 6 in.; between perpendiculars, 246 ft; beam, 45 ft. 4 in.; depth, 23 ft.; draught, 17 ft. 6 in.; displacement, 2,298 tons; dead-weight, 1,240 tons; speed, 12.5 knots.



Fig. 3 - Russian fishery factoryship (length about 150 feet) operating in Bering Sea.

The main improvements over the earlier Pushkin class are a decrease of 8 inches in the freeboard, reducing the wind area and consequential drift when trawling, and a lengthening by 6 ft. of the trawl deck to 66 ft., thus enabling the entire trawl to be hauled on deck in one operation.

There is also an impressive increase in fish hold space over the Maiakovski class. This has been obtained by reducing the fuel capacity to 500 tons and by using a less bulky main engine. It appears that the Maiakovskis were returning home with 150 tons of Diesel fuel and 60 tons of boiler oil still in their tanks.

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**NORTHWEST ATLANTIC FISHERIES, 1956-60:**

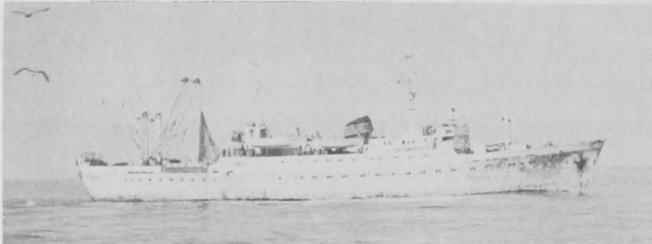
The U.S.S.R. began fishing in Northwest Atlantic waters in 1956 after conducting exploratory cruises in 1955. According to the International Commission for the Northwest Atlantic Fisheries (ICNAF), the Soviets have reported annual catches that have rapidly increased from 17,000 metric tons in 1956 to over 258,000 tons in 1960.

Table 1 - U.S.S.R. Catch in ICNAF Convention Area, 1956-1960					
Species	1960	1959	1958	1957	1956
	. . . . . (Metric Tons) . . . . .				
Cod . . . . .	139,612	15,453	5,826	18,041	3,001
Haddock . . . . .					
Ocean perch . . . . .	104,147	155,004	108,900	48,805	12,908
Halibut . . . . .	237	224	89	212	104
Flounder . . . . .	4,392	678	267	819	12
Others . . . . .	9,686	10,578	1,674	1,458	984
Total . . . . .	258,074	181,937	116,756	69,335	17,009



## U. S. S. R. (Contd.):

In a period of four years, the U.S.S.R. fisheries have expanded to account for about 12 percent of the over two million tons of fish taken annually in the Convention Area and to lead the other member nations in the ocean perch catch. Fishing for ocean perch, cod, and haddock has been conducted on the banks off Newfoundland and Labrador. In 1961, Soviet fishing fleets moved southward to Georges Bank off the United States coast.



Large Soviet stern trawler (Maiakovski class) fishing in North Atlantic on the "northern edge" of Georges Bank in October 1961. Trawler's home port is Klaipeda.

The Soviet fishing fleet operating in the Convention Area during 1959 consisted of 111 vessels with a total tonnage of 126,596 tons. Operations have been characterized by the use of large stern factory-trawlers as well as conventional trawlers; the larger types have refrigerated holds.

Tonnage Class	No. of Vessels	Total Tonnage	Average Tonnage
151-500 . . . . .	39	10,296	264
501-900 . . . . .	31	19,500	630
901-1,800 . . . . .	6	7,200	1,200
Over 1,800 . . . . .	35	89,600	2,560
Totals . . . . .	111	126,596	1,141

Home ports reported for the Soviet vessels were Murmansk on the Barents Sea, and Kaliningrad, Klaipeda, and Riga on the Baltic Sea. (International Commission for the Northwest Atlantic Fisheries, *Statistical Bulletins*, vol. 7-8; 1959 and 1960.)



## United Kingdom

### AID FOR FISHING INDUSTRY:

In seven years (1954 through March 31, 1961) Britain's White Fish Authority has financially assisted the industry to the extent of £39,984,137 (almost US\$112 million) in loans and grants.

Loans totaled £28,228,884 or \$79 million (£23,424,516 or \$65.6 million for the near-middle water fleet and £4,804,368 or \$13.4 million for the inshore industry) and grants amounted to £11,755,253 or \$32.9 million (£9,334,200 or \$26.1 million and £2,421,053 or \$6.8 million, respectively). All loans and grants were for vessels, except £566,399 or \$1.6 million for inshore engines.

In addition to this financial aid, the British Government also assists the industry through the white fish and herring industry subsidies. These were extended in 1961 to compensate for the loss of traditional British fishing grounds.

It is estimated that the white fish subsidy will cost £1,497,064 (\$4.2 million) for the near-middle water fleet and £591,826 (\$1.7 million) for the inshore industry, but distant-water trawlers also will be subsidized at the rate of £17 (\$47.60) for every day at sea. The daily rate for near-middle water vessels will vary, depending on vessel size, except in the case of coal burners which will be paid £10 (\$28.00) a day at sea. The inshore subsidy is paid on landings and has been raised by 4d. per stone (31 U.S. cents a hundredweight) to 1s. 2d. a stone (\$1.16 a hundredweight) for gutted and 1s. a stone (\$1.00 a hundredweight) for round fish. The new white fish subsidies came into force on August 1, 1961.

The herring industry subsidy (as from September 1) ranges from 3½ d. per stone (27.5 U.S. cents a hundredweight) to £12-£14 (\$33.60-\$39.20) a day at sea. The Herring Industry Board will also continue to pay a subsidy to maintain prices for surplus herring used for meal and oil production.

Loss of British fishing grounds will follow Britain's agreements with Norway and Iceland over their unilateral claim to a 12-mile territorial sea. Until October 31, 1970, British vessels will be able to continue to fish in a zone between 6 and 12 miles off the Norwegian coast. After that date they will have to stay outside 12 miles.

The agreement with Iceland provides that until March 1964, British vessels will continue to fish at certain seasons and in certain areas in a 6-12 mile zone around Iceland.

Following Britain's agreements with Norway and Iceland, the Soviet Union gave notice to terminate an agreement which has enabled British vessels to fish in certain Russian northwest waters within 12 miles of the coast. The Soviet Union also has claimed a 12-mile limit.

Speaking in the House of Commons debate when the new subsidies were approved, the Minister for Agriculture and Fisheries said that Britain's agreements with Iceland and Norway were expected to result in a drop of 25 percent in the total British distant-water catch. This would be equivalent to a loss of £5½ million (\$15.4 million) and he doubted whether the vessels by fishing elsewhere could make up more than two-thirds of it. That would mean a net loss of about £2 million (\$5.6 million) and the Government had decided to make up £1,250,000 (\$3.5 million) of it. That worked out at £17 (\$47.60) a vessel a day, or £5,500 (\$15,400) a year towards the estimated loss of £8,000 (\$22,400).

The above data on White Fish Authority loans and grants are from the Authority's annual report to March 31, 1961. The term "white fish" excludes pelagic fish and shellfish.

White fish landings in the United Kingdom in the calendar year 1960 totaled 805,028 metric tons, worth £60,686,102 (\$169.9 million). Landings by British vessels totaled 693,239 tons and by foreign vessels (fishing and other) 111,789 tons. Of the British vessel landings, half was taken by the distant-water fleet, one-third by the near-middle water fleet, and the remainder by the inshore industry.

Distant-water vessels dropped in number by 10 to 229 and near-middle water vessels by 26 to 502.

The White Fish Authority's income for the year totaled £325,309 or \$910,900 (£235,840 or \$660,300 from general levy) and expenditures £310,272 (\$868,800), leaving a surplus of £15,037 (\$42,100). Expenditures comprised mainly general administration £137,185 (\$384,100), publicity £74,882 (\$209,700), fishermen's training courses £31,184 (\$87,300), research and experiments £29,609 (\$82,900). (*Fisheries Newsletter*, November 1961.)

