



## International

### TUNA

#### U. S. INTERIOR DEPARTMENT OFFICIALS PARTICIPATE IN UNITED STATES-JAPAN CONFERENCE IN TOKYO:

Frank P. Briggs, Assistant Secretary of the Interior for Fish and Wildlife, and Philip H. Trezise, Deputy Assistant Secretary of State for Economic Affairs, were cochairmen of the United States delegation to the United States-Japan Tuna Conference in Tokyo, Japan, October 9-13, 1962.

The conference was to be an official inter-governmental meeting of experts on essentially technical matters to exchange information and views on certain aspects of the conservation, production, processing, and marketing of tuna by the United States and Japan. Greater understanding and mutual benefits are expected from this bilateral exchange and discussion of current information on such matters as tuna fisheries, trends in tuna production, conservation and utilization of tuna resources, market trends, and expanded international trade of tuna.

The Tokyo meeting was first suggested last May 16 by Ichiro Kono, Japan's Minister of Agriculture, Fisheries, and Forestry, when he visited the United States and met Secretary of the Interior Stewart L. Udall. A similar conference was held in Tokyo in September 1959. Tuna fishery operations since have expanded even more around the globe, and because Japan and the United States are the two most prominent tuna-producing nations in the world, Minister Kono proposed that another conference on tuna would be most appropriate and helpful. Secretary Udall had indicated to Minister Kono that the Department of the Interior would generally be interested in such a meeting. Plans for the conference were developed by both countries.

Members of the United States delegation attending the Tokyo conference included 9 other Government representatives and 11 industry advisers.

#### GENERAL AGREEMENT ON TARIFFS AND TRADE

#### EFFECTS OF NONTARIFF MEASURES ON FISHERY TRADE STUDIED:

A study to determine the use and effects of nontariff measures in support or protection of agriculture or fishery production and trade was conducted by Committee II of the General Agreement on Tariffs and Trade (GATT). The reports resulting from the study contain the Committee's general findings and conclusions on the use and effects of support and protection measures on international trade.

The Committee consulted with 39 GATT member countries about their policies. Of the 39 member countries, 34 of them had important fisheries. With the experience and information gained from those consultations, the Committee has published its second and third reports. Pertinent portions of the report concerning fisheries follow:

Nontariff Measures: Of the 34 countries examined by the Committee, all but 6 had some form of nontariff devices affecting trade in fish and fishery products. There are wide differences from country to country in the use of nontariff measures, and some of the measures examined are either not in use or of no practical importance, as for instance mixing regulations and State-trading.

Consumer's subsidies and arrangements for the disposal of surpluses are in use in some countries. The predominant and important devices applied are various forms of income and price support including government subsidies, import levies and quantitative restrictions on imports. Of the 34 countries examined, 17 of them practice income

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and price support systems of various kinds, and of those countries, 12 give direct governmental financial support to the fishing industry.

In most of those countries subsidies, either as grants or as loans at preferential interest rates, are given in connection with the building of new fishing vessels and in order to improve generally the fishing gear and equipment. Governmental guaranteed minimum price systems in many cases also involve subsidies. A few countries give subsidies directly to the fishermen to improve their incomes.

Grants and loans given to the fishing industry for improving the equipment and the guaranteed minimum price systems are arrangements which are usually in operation over a long period of time, as a part of the fishing policy pursued by the country. Direct subsidy schemes are often of a more limited character based on special circumstances such as sudden and heavy decreases in catches of certain products or sudden drops in market prices.

Quantitative restrictions are applied by 25 of the 34 countries. In some countries, quantitative restrictions are directed against imports from certain countries or areas. Other countries impose restrictions on all or most imports of fish and fishery products. Only 13 of the 25 countries stated that quantitative restrictions are imposed for balance-of-payment reasons. Quantitative restrictions appear to be an integral part of the protective systems in force in many countries and have no longer any connection with the balance-of-payment position. Seventeen of the countries examined have GATT tariff bindings on all or some categories of fish imports; many of those countries maintain some form of nontariff devices by which the benefit of the bindings is reduced or in some cases largely nullified. In addition, many of those countries aim at self-sufficiency or a high degree of self-sufficiency.

Effects of Nontariff Measures: There is a general feeling that the widespread nontariff measures applied by the various countries, especially such measures as public financial assistance, and quantitative restrictions affect production, consumption, and prices in international trade in fish and

fishery products. The lack of expansion of trade must to a large extent be attributed to those measures, which in most cases seem to be especially designed as part of the fishery policies pursued by countries.

In countries where quantitative restrictions are in use, the measures constitute a barrier to the development of the trade for fishery products against which they are directed, in this way protecting the producers from import competition and insulating them from fluctuations in world market prices.

Income and price support, including governmental subsidies, grants and loans at preferential rates, may in the long run have adverse effects on the fishing industry if the financial support leads to overfishing in certain waters.

Nontariff measures will, in one way or another, tend to restrain structural changes and natural development in production and to impede the free development of competition in international trade.

The increase in production is not reflected in a corresponding increase in human consumption. Removal of the existing barriers to trade would lead to an increase in the consumption of edible fish products, especially in the field of frozen products. The great inland areas in the world, where fish supplies until now have been scarce or nonexistent should be potential markets for large quantities of fish, especially frozen fish, when "cold chains" are sufficiently established.

The national fishery policies pursued create great problems for the traditional exporting countries and, in particular, for those countries whose national economies depend heavily upon fisheries. Furthermore, the measures applied cannot be said to have solved adequately the economic problems confronting the fisheries of other countries.

Many of the countries examined have GATT tariff bindings on fish imports. Many of those countries maintain some form of nontariff device which reduces the benefits of the bindings and, in some cases, largely nullifies them. Certain of those countries are important fish consumers. The Committee noted that the impairment of bindings was obviously of great significance to the fish exporting countries. The Committee took note that a positive assurance of access to the markets

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of the countries with whom tariff concessions were negotiated is regarded as essential by some exporting countries if they are to be able to participate effectively in tariff negotiations."

Notes: (1) A copy of the 50-page report (GATT Program for Expansion of International Trade, Trade in Agriculture Products, Second and Third Reports of Committee II) may be obtained from the Sales Agent for GATT Publications, International Documents Service, Columbia University Press, 2960 Broadway, New York 27, New York. The price is \$1.00.

(2) See Commercial Fisheries Review, June 1962 p. 1.

### EUROPEAN FREE TRADE ASSOCIATION

#### NORWAY CUTS TARIFFS ON IMPORTS FROM OTHER EFTA COUNTRIES:

Norway's tariffs on imports from six other European Free Trade Association (EFTA) countries were cut from 70 percent to 60 percent effective September 1, 1962. Norway has also agreed to make a further 10 percent reduction not later than April 30, 1963. Five of the Outer Seven countries reduced their import tariffs from 70 percent to 60 percent in March 1962. Another 10-percent cut was to be made by those 5 countries on October 31, 1962.



The second 10-percent cut in October 1962 by the other EFTA countries was effected much earlier than originally planned, and will mean a total 50 percent tariff slash since the EFTA agreement was signed. The Norwegian tariff cuts had been postponed with approval of the EFTA Ministerial Council. (News of Norway, August 30, 1962, of the Norwegian Information Service.)

Note: See Commercial Fisheries Review, August 1962 p. 51.

### FOOD AND AGRICULTURE ORGANIZATION

#### FISHING METHODS AND GEAR SEMINAR AND STUDY TOUR IN U.S.S.R.:

Representatives from Asian and African countries participated in a seminar and study tour on fishing methods and fishing gear technology, held in the Union of Soviet Socialist Republics August 18 through September 28, 1962. The seminar-study tour was sponsored by the Food and Agriculture Organization

(FAO) at the invitation of, and in cooperation with the U. S. S. R. Government.

The Prospectus for the Seminar-Study Tour as outlined by FAO follows:

Background and Objectives: The participants in the seminar and study tour will be fisheries officers charged with developing fishing industries in their home countries which are now at various levels of development. All are familiar with the general techniques of fishing. Most of the countries are tropical or subtropical and the emphasis will be on warm-water fishing, mainly with small and medium size mechanized craft ranging from 25-100 feet, but with some briefing on fishing with bigger vessels.



During the seminar, the entire field of fishing methods and gear technology will be covered as far as time permits, but with major emphasis on basic subjects such as materials, rational design and construction of fishing gear, fishing theory including tactics of fish finding and attraction of fish, as well as a general briefing on various methods of fishing and discussion of their relative suitability under various conditions. Several of those subjects will be covered more thoroughly in the course of the study tour where fishing operations can be observed and analyzed critically.

Major emphasis will be on the methods of main importance in the home countries of the participants, such as long-lining and gill-netting (bottom-set and drifting), trawling in shallow water for fish and shrimp, warm-water fishing for tuna, scomberoids, etc., and fishing with various types of traps, haul seines, encircling nets and purse seines.

The proposed seminar study tour has been planned with those objectives in view so that the group of participants from countries in Asia and Africa eligible for technical assistance might discuss their respective problems with each other, and with an experienced group of subject-matter specialists, against a background of a highly advanced and varied fishing industry and gear technology research and development activity.

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## PROGRAM

## I SEMINAR

Fisheries specialists from the U.S.S.R. and FAO will deliver a number of lectures and lead a series of discussions under the following main headings:

1. Materials of Fishing Gear:
  - 1.1 Terminology and numbering systems.
  - 1.2 Characteristics of net materials and methods of testing these.
  - 1.3 Relative efficiencies of gear made of different materials.
  - 1.4 Preservation and maintenance of gear.
2. Net Making:
  - 2.1 Mechanized knitting of webbing.
  - 2.2 Knotless nets.
  - 2.3 Cutting and joining of machine-made webbing.
  - 2.4 Framing and hanging of nets.
3. Rational Design of Fishing Gear:
  - 3.1 Engineering theory and experiments with models.
  - 3.2 Measuring instruments and underwater observation.
  - 3.3 Selectivity; comparative fishing experiments.
  - 3.4 Specifying shape, dimensions, materials of gear.
4. Operation of Fishing Gear:
  - 4.1 Types and choice of fishing gear (with emphasis on warm-water fishing) with small and medium sized craft; special lectures on gill-netting and long-lining, purse-seining, trawling for shrimp and fish, tuna fishing.
  - 4.2 Efficient handling of fishing gear.
  - 4.3 Efficiency in handling of catch.
  - 4.4 Fish processing on board craft.
  - 4.5 Choice of type and size of boat in relation to methods of fishing, distance to grounds, etc.
5. Strategy and Tactics of Fishing:
  - 5.1 Location of fish.
  - 5.2 Detection of fish.
  - 5.3 Attraction of fish.
  - 5.4 Electrical fishing.
6. Training of Fishermen and Gear Technologists:
7. U.S.S.R. Fisheries:
  - 7.1 Review of U.S.S.R. fishing industry.
  - 7.2 Organization of the fisheries.
  - 7.3 The role of research in the development of fisheries.

These lectures will be conducted mainly in Moscow during the period August 18-31. Additional lectures and discussion periods will be arranged during the Study Tour of the Caspian and Black Sea fisheries.

## II DEMONSTRATIONS

During the period devoted to the Seminar, a number of visits will be arranged to fishery institutions and places of interest in and near Moscow. Those will include: the Institute of Marine Fisheries and Oceanography, VNIRO, including the Fishing Technique Laboratory, a net making plant, etc.

## III STUDY TOUR

Caspian Fisheries, Based at Astrakhan:

1. Visit to CaspNIRO technological institute.
2. Lectures on U.S.S.R. fishing gear with demonstration of models.
3. Visit to fisheries cooperative, inspection of boats and sea trip to observe trap fishing.
4. Visit to net making plant.
5. Visit to processing plant.
6. Visit to Fisheries Training School.
7. Lectures on pump fishing with light attraction.

Pump Fishing with Light Attraction, Based at Baku:

1. Sea trip to observe pump fishing in the Caspian.

Black Sea Fisheries, Based at Yalta:

1. Inspection of big, modern factory trawler.
2. Sea trips - purse-seining, drifting, trawling.

Field Visits to Observe Fishing in Rivers, Lakes and Reservoirs:

During the period September 1-26, the participants will be conducted on a tour of fishing centers and fishery institutions in the Caspian and Black Sea area. They will have an opportunity to study the conduct of fishing operations with various types of equipment and methods, as well as the handling of the catch, technological and biological research activities, vocational training of fishermen, cooperative and collective fishing activities, and various ancillary undertakings associated with fishing. Frequent discussion periods will be arranged wherein the participants will have ample opportunity to discuss among themselves and with subject matter specialists from the U.S.S.R. and FAO, the equipment and methods observed and their applicability in the home countries of the participants.

The Seminar-Study Tour will close in Moscow on September 28.

Note: See Commercial Fisheries Review, October 1962 p. 2.

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**RECOMMENDATIONS MADE AT WORLD SCIENTIFIC MEETING ON BIOLOGY OF SARDINES BEING CARRIED OUT:**

At the World Scientific Meeting on the Biology of Sardines and Related Species (held in Rome, September 14-21, 1959), several recommendations were made proposing future action by the Food and Agriculture Organization (FAO).

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In Supplement 1 of the report of the meeting, FAO describes the actions taken or proposes to take on the recommendations as follows:

I. The meeting recommended that FAO should publish an annotated bibliography of sardine research up to 1959. Such a bibliography is available for the years since 1957 in the Current Bibliography for Aquatic Sciences and Fisheries. References in the Current Bibliography to sardine research can be found by referring to the Taxonomic Indexes. FAO therefore proposes to concentrate on preparing a comprehensive bibliography for the years since 1931 when G. C. Wheeler's, A Bibliography of the Sardines (Fish. Bull., Sacramento 1931, vol. 36, 135 pp.), was published until 1956 inclusive, including Sardinella which is not covered in the Current Bibliography. FAO is contacting principal fisheries laboratories concerned with sardine research to see what material is already available. It is proposed that the bibliography will be compiled and issued during the 1962-63 FAO budgetary biennium.

II. It is proposed to publish in the FAO Fisheries Biology Branch Technical Papers Series, an indexed list of names and addresses of scientists concerned with sardine research according to a format which has already been established in other fields such as tuna research workers, algologists. The cooperation of research institutions will be sought in making such a list comprehensive and up-to-date. FAO expects to issue the list in 1962.

III. The need for follow-up meetings on the biology of sardines and on particular aspects of sardine research is expected. The desirability of holding such a meeting within 5 years of the first meeting, as was recommended, will be borne in mind, but FAO will have to consider relative priorities of such a meeting and of meetings on other species groups.

IV. The meeting recommended that similar meetings should be organized on other species for which major fisheries exist. This recommendation was implemented by plans for convening a World Scientific Meeting on the Biology of Tunas and Related Species, which was held in La Jolla, Calif., July 2-14, 1962.

V. The meeting recommended that FAO should continue to work for the standardiza-

tion of routine methods. It is proposed to effect this through contacts with regional fisheries councils and commissions or similar organizations, or where these do not exist, with national research organizations directly.

VI. It was recommended that conversion factors for length dimensions should be submitted by the various institutions to FAO. This has been done, and the data provided is summarized in a table included as table 2, Subject Synopsis 2, A Preliminary Comparative Study of the Growth, Maturity and Mortality of Sardines, by S. J. Holt, which is included in volume 2 of the Proceedings.

Note: See Commercial Fisheries Review, August 1962 p. 49, August 1959 p. 38; February 1959 p. 41.

### INTERNATIONAL LABOR ORGANIZATION

#### WORK CONDITIONS OF COMMERCIAL FISHERMEN REVIEWED:

The secretariat of the International Labor Organization (ILO) is preparing several reports on employment conditions of commercial fishermen for submission to the Second Session of the Committee of Experts on Fishermen, which will be held in the latter part of 1962. The reports concern crew accommodation on board fishing vessels, safety on board fishing vessels, accident insurance of fishermen, and vocational training and certificates of competency.

In 1954, an International Labor Organization Committee of Experts on Fishermen met and recommended conventions concerning minimum age, medical examination, and articles of agreement for fishermen. The conventions were adopted by the 43rd conference of the International Labor Organization in 1959. The first two conventions, concerning minimum age and medical examination, have this year received a sufficient number of ratifications to enter into force.

The United States participated in previous deliberations of the Committee of Experts on Fishermen and plans to send representatives to this year's meeting.

Note: See Commercial Fisheries Review, Sept. 1959 p. 52.

### UNESCO INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION

#### SECOND SESSION HELD IN PARIS:

The second session of the Intergovernmental Oceanographic Commission (IOC) convened in Paris, France, September 20-

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28, 1962. The Commission was established by UNESCO in 1960 for the purpose of promoting coordinated scientific investigation with a view to learning more about the nature and resources of the oceans.

The session was attended by 5 United States representatives and six advisers.

There was general discussion at the second IOC session that other nations not now participating in the International Cooperative Investigation of the Tropical Atlantic (ICITA) program, might join. The delegate from Spain stated that his country was prepared to participate in that program. There was also considerable discussion that Japan might take part in it. Japan operates a number of fisheries research vessels in the tropical Atlantic which would tie in with one of ICITA's main objectives in developing the fisheries off Africa.

A resolution submitted by the United States delegation at the second IOC meeting was unanimously adopted by the Commission.

The resolution designates the Scientific Committee on Oceanic Research of the International Council of Scientific Unions as the advisory body to the Commission on the broad scientific aspects of oceanography. Also designates the Advisory Committee on Marine Resources Research of the Food and Agriculture Organization as the advisory body to the Commission on fisheries aspects of oceanography, the Committee being augmented for this purpose by two additional members from countries not members of FAO to be recommended by the Bureau of the Commission as invited by the Director-General of FAO in his letter of August 17, 1962. Taking into account the important activity of the U.S.S.R. in fisheries oceanography, it is recommended that the two additional members of this Committee be selected from scientists in this field of research in the U.S.S.R. Further, it requests the Bureau and the Secretary of the Commission to consult WMO, IAEA, and other appropriate intergovernmental and nongovernmental organizations of a world-wide and regional nature on international programs in oceanography.

The first session of the Intergovernmental Oceanographic Commission was held in Paris, October 19-27, 1961. At that meeting,

the Commission took the first steps to coordinate national and regional programs on oceanography and to establish the organizational mechanism, within the Commission, which could develop an integrated, well-coordinated international program in oceanography.

Note: See Commercial Fisheries Review, February 1962 p. 55.

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#### WORKING GROUP PLANS PROGRAMS FOR TROPICAL ATLANTIC INVESTIGATIONS:

The proposal for an oceanography-fishery investigation of the tropical Atlantic Ocean, submitted by the U. S. Bureau of Commercial Fisheries to the Interagency Committee on Oceanography (ICO), became a major international undertaking under the sponsorship of the Intergovernmental Oceanographic Commission (IOC).

An IOC Working Group met in Washington at the National Oceanographic Data Center June 20-23, 1962, to draw up plans for an International Cooperative Investigation of the tropical Atlantic. The Bureau's Biological Laboratory, Washington, D. C., with assistance from the National Oceanographic Data Center and the Navy Hydrographic Office, were responsible for the preliminary planning and arrangements for the meeting.

The opening session on June 20 was attended by some 60 persons, including representatives of 14 foreign countries. There was good representation from Universities on the east coast of the United States who have an interest in oceanography.

The purpose of the meeting was to plan in detail the working programs of the Tropical Atlantic Investigations, which are to start early in 1963. Also, to arrange for the exchange and publication of the resulting data, and the preparation and publication of an atlas.

The United States is to contribute seven ships to the investigation, representing the Bureau of Commercial Fisheries, Coast and Geodetic Survey, Woods Hole Oceanographic Institution, Texas A & M, and the Lamont Geological Observatory. Two fisheries research vessels and a large oceanographic vessel from the U.S.S.R. are to participate. Other ships will be from Argentina, Brazil, France, Ivory Coast, Nigeria, and the (former French) Congo.

The plans adopted at the Working Group meeting were to be presented at the Inter-

## International (Contd.):

governmental Oceanographic Commission  
September 1962 meeting in Paris.

Note: See Commercial Fisheries Review, August 1962 p. 56.

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COORDINATION GROUP ON THE  
INTERNATIONAL COOPERATIVE  
INVESTIGATIONS OF THE  
TROPICAL ATLANTIC MEETS:

A meeting of the Coordination Group on the International Cooperative Investigations of the Tropical Atlantic (ICITA), a component of the UNESCO Intergovernmental Oceanographic Commission, was held in Paris, France, September 17-19, 1962. The purpose of the Group meeting was to coordinate the plans and programs of the various countries participating in the tropical Atlantic investigations.

The Paris meeting of the Coordination Group was recommended by the Working Group of the ICITA, which met in Washington, June 20-23, 1962.

## FISH MEAL

## WORLD PRODUCTION, JULY 1962:

According to preliminary data from the International Association of Fish Meal Manufacturers, world production of fish meal in July 1962 amounted to about 227,533 metric tons, an increase of 11.5 percent over world production in July 1961.

Most of the principal countries producing fish meal submit data to the Association monthly (see table).

World Fish Meal Production by Countries, July 1962			
Country	July		Jan.-July
	1962	1961	1962
..... (Metric Tons) .....			
Canada .....	5,914	6,287	49,193
Denmark .....	11,700	8,010	50,570
France .....	1,100	1,100	7,700
German Federal Republic ...	7,196	6,229	43,317
Netherlands .....	-	500	2,400
Spain .....	2,117	2,116	15,829
Sweden .....	10	149	2,506
United Kingdom .....	7,287	6,813	44,935
United States .....	47,685	57,636	151,435
Angola .....	1,100	2,046	15,567
Iceland .....	19,094	18,133	51,424
Norway .....	36,494	24,730	67,178
Peru .....	65,716	44,933	610,158
South Africa (including South- West Africa) .....	22,120	25,300	180,316
Total .....	227,533	203,982	1,292,528

Note: Belgium, Chile, Japan, and Morocco do not report their fish meal production to the International Association of Fish Meal Manufacturers at present.

The increase in world fish meal production this July was mainly due to more output in Peru (up 46.3 percent), Norway (up 47.6 percent), and Denmark (up 46.1 percent). Norway's increase in production in July 1962 reversed the downward

trend in the previous two months. This year through July, Peru had increased landings of anchoveta and Denmark's landings of industrial fish were up. The increase was partly offset by a sizable drop in fish meal production in the United States (down 17.3 percent), South Africa (down 12.6 percent), and Angola (down 46.2 percent). The menhaden catch in the United States in July 1962 was 14.7 percent below the catch in July 1961.

Peru accounted for 28.9 percent of world fish meal production (for countries listed) in July 1962, followed by the United States with 20.9 percent, and Norway with 16.0 percent.

During the first seven months of 1962, Peru accounted for 47.2 percent of total fish meal production, followed by South Africa with 14.0 percent, and the United States with 11.7 percent.



## Belgium

JAPANESE CANNED TUNA PRICES,  
MID-SEPTEMBER 1962:

In mid-September, the average prices of Japanese canned tuna, c. & f. Antwerp were:

<u>Yellowfin or Skipjack:</u>	
<u>Lightmeat, solid pack in cottonseed oil, Fancy A:</u>	
48 7/8-oz. cans .....	\$7.42 a case
48 3/4-oz. cans .....	\$4.40 a case
6 6 1/2-oz. cans .....	\$8.75 a case
<u>Dressed tuna with tomatoes:</u>	
48 6 1/2-oz. cans .....	\$6.70 a case

(United States Embassy, Antwerp, September 18, 1962.)

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## FROZEN FISH MARKET:

Belgium is importing an increasing amount of frozen fish, and a domestic frozen fish industry has developed. The ready availability of fresh fish in Belgium has dampened the sale of frozen fish in the past. But the appearance of chain stores and supermarkets in recent years has helped change the pattern of consumer buying. Today a wide variety of frozen fish is available, including cod, haddock, whiting, bream, and plaice. Fish fillets are retailed in one-half and one-pound packages. Whole and gutted fish are packed in 2- to 15-pound packages. Frozen shellfish such as shrimp, spiny lobsters or crayfish, and scallops are also available in consumer packages.

The domestic frozen fish industry has a production capacity of 200 metric tons every 24 hours and a cold-storage capacity of about 1,200 cubic meters where fish can be stored at -25° to -30° C. (-13° to -22° F.). It also has a storage capacity of about 2,500 cubic meters where fish can be cooled at 0° to -1° C.

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30.2° to 32° F.). Freezing is normally done at temperatures of -30° to -40° C. (-22° to -40° F.), depending on the type of fish.

Round fish are filleted by machine. The machines currently in use can handle 25 pieces a minute, which corresponds to four metric tons an hour for large fish and two tons for smaller varieties. Flatfish are filleted by hand.

Belgium's frozen fish industry has not yet reached full capacity. Because landings are irregular, prices vary and are often high. This affects the still hesitant consumer market and the industry in turn is reluctant to undertake maximum production. Some circles feel that increased production would stimulate consumption. Despite the uncertainty, an increasing quantity of frozen fish is being imported from neighboring countries and the struggle for the consumer market is becoming more and more severe.

The sale of consumer packs of frozen foods in Belgium is still handicapped by the large number of small retail stores which lack refrigerated food cabinets. Belgium has only 4,000 retail outlets equipped with refrigerated food cabinets, far less than several other European countries of comparable population. To encourage the use of frozen foods, some refrigerated cabinets are now being distributed to selected retailers at exceptionally advantageous terms. (Canadian Foreign Trade, September 8, 1962.)



## Brazil

## FISHERIES TRENDS, AUGUST 1962:

The new fishing port at Itajai will be completed by September 1963. The new port costing 37.6 million cruzeiros (US\$82,728) will have cold-storage space for 150 metric tons of fish.

The Third National Meeting of Specialists in Sea Fishery Research was held August 20-24, 1962, at Florianopolis, Brazil. Fishery experts from all Brazil attended. (United States Consulate, Curitiba, September 10, 1962.)



## Canada

## WEST COAST VESSELS ENTER TUNA FISHERY OFF SOUTHERN CALIFORNIA AND MEXICO:

Two British Columbia purse-seiners (the Pacific Harvester and the Dominator) were diverted from the Canadian herring fishery and sent to tuna fishing grounds off California and Mexico in early July 1962. In a short time each vessel had caught a full load of about 100 tons of bluefin and albacore tuna. They unloaded their catch in Steveston, British Columbia, in August 1962. According to reports, the albacore tuna was to be canned in British Columbia, while the bluefin was to be sold to United States canners for processing.

The brine-spray freezing system installed on the purse-seiners by the Fisheries Research Board of Canada was described as an unqualified success. Tuna were frozen solid by the new freezing system and were delivered at Steveston in prime condition. (Facts on Fish, Fisheries Association of B. C., August 1962.)

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## BRITISH COLUMBIA'S RECORD PACK OF CANNED PINK SALMON:

British Columbia packers had canned a record 1,179,369 standard cases of pink salmon by September 15, 1962, according to preliminary data from the Canadian Department of Fisheries. Pink salmon accounted for 67.6 percent of the total British Columbia canned salmon pack of 1,744,839 cases on September 15, 1962. The pack also included 289,972 cases of sockeye salmon, 149,782 cases of silver salmon, 107,940 cases of chum salmon, and 17,776 cases of miscellaneous species of salmon.

The British Columbia pack of sockeye salmon is heavily dependent on returns to the Fraser River system of the Adams River race of sockeye salmon. The International Pacific Salmon Fisheries Commission early this year predicted a low return of Adams River sockeye because the river flow was low when the yearling salmon entered the salt water in 1960. The returns bore out this prediction and the Commission was forced to restrict fishing severely to ensure an adequate escapement to the spawning grounds. This year's poor Adams River run of sockeye salmon was particularly disappointing because it was based on brood stock from the near-record return in 1958.



## Canada (Contd.):

Returns of sockeye salmon to the Skeena River in the northern section of British Columbia were also light.

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**GOVERNMENT LIBERALIZES FISHING VESSEL SUBSIDY REGULATIONS BY DROPPING VESSEL REPLACEMENT PROVISION:**

The requirement that a steel fishing trawler built with the aid of a Government subsidy must replace a steel or wooden fishing vessel was not included in amended Ship Construction Assistance Regulations effected by Order-in-Council of the Canadian Government and published in the Canada Gazette, August 22, 1962. This means applicants no longer have to withdraw a steel or wooden fishing trawler from the fishing fleet in order to qualify for a capital subsidy toward the cost of building a new steel fishing trawler.

The new Regulations continue the capital subsidy for new steel fishing trawlers at the old rate of 50 percent of approved costs. The subsidy may be paid for the construction of new trawlers to be operated out of a port in any of the Provinces of New Brunswick, Newfoundland, Nova Scotia, Prince Edward Island, or Quebec. The subsidy will now be applicable only to vessels on which construction was begun after May 12, 1961. Trawlers built with the aid of a subsidy must have a steel hull and be at least 75 feet in length. The Regulations stipulate that shipowners who receive a subsidy must agree to undertake to retain the vessel on Canadian registry for a period of five years, and not to sell or transfer the vessel without the consent of the Canadian Maritime Commission and the approval of the Treasury Board.

Note: See Commercial Fisheries Review, Aug. 1961 p. 58.



## Colombia

**NATIONAL FISHING EXPOSITION TO BE HELD NOVEMBER 20-30, 1962:**

The Colombian Second National Fishing Exposition and Second National Fishing Congress will be held in Bogota November 20-30, 1962, according to the Colombian Fishermen's Association and Fishing Industries. The Association is interested in having

United States firms display fishing equipment and supplies at the fair. They are also interested in United States investments in Colombia's fishing industry to help exploit their fish resources along both the Atlantic and Pacific Coasts. (United States Embassy, Bogota September 17, 1962.)



## Cuba

**FISHING PORT TO BE BUILT BY SOVIETS:**

Plans for the building of a major fishing port in Cuba by the Soviets were announced by the Prime Minister of Cuba on September 25, 1962. The port will be used as a base for the Soviet's Atlantic fishing fleet. The Prime Minister said the facilities will make unnecessary the trips Soviet trawlers now make to Eastern European ports for maintenance and overhaul.

A small fleet of Russian trawlers, equipped with refrigeration and electronic detection equipment, arrived this summer in Havana. It was reported that Soviet crews would instruct Cubans in the operation of the vessels and that the fleet ultimately would become the property of the Cuban Government. Earlier this year the Prime Minister said that Cubans would pay for the Soviet vessels by exporting fish to the Soviet Union. The Russians were to provide tinplate for canning the fish.

After signing of the contract by the Prime Minister and the Soviet Fisheries Minister, Cuba's Prime Minister appeared on television to make the announcement. He said the port will cost 12 million pesos (about US\$12 million at the 1960 rate of exchange). The location of the port was not announced.

The Soviet Union will pay for the cost of building the port through a "credit" to finance purchase of the machinery needed to operate the port. The Prime Minister stated that it will be built by Cuban laborers and material; Cuba will be compensated for this by additional food shipments from the Soviet Union. But the port will actually belong to Cuba and will be operated by Cuban workers, the Prime Minister said.

The port will be equipped with facilities for vessel repairs so that Soviet vessels will not have to return to Russia for periodic overhaul. The port would provide facilities for 115 to 130 medium trawlers. The port will

Cuba (Contd.):

be built and used by the Soviets under a 10-year contract. But the Prime Minister said the pact was a mere formality. "It surely will continue much longer than 10 years," he said.

Thus far the largest Cuban fleet is believed to operate out of the Las Villas Province town of Caibarien, on the north coast of central Cuba. The fishermen sail in locally-made 33-foot motor trawlers designed to hold a catch of about 1,000 pounds.

The prime Minister said the Cuban fishing fleet next year would comprise 5 Soviet vessels at present attached to the fleet but to be bought outright, 5 Japanese vessels due for delivery at the end of this year, 2 Polish vessels, and 50 75-foot vessels being built in Cuba.

He claimed that next year 110 75-foot vessels and 12 122-foot vessels to be built in Cuba would be added to this fleet.

Note: Cuban Government considers peso on par with U. S. dollar, but foreign exchange brokers in Miami give about 16 U. S. cents for a Cuban peso.

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SOVIET-BLOC FISHERY TECHNICIANS IN CUBA:

A June 1962 research report issued by the Department of Fisheries of Cuba lists a Soviet technician on the staff of the Fish Technology Section. In addition, a specialist from East Germany is in the Cuban section of Resource Development.



Denmark

FISH FILLETS AND BLOCKS AND FISHERY INDUSTRIAL PRODUCTS EXPORTS, JULY 1962:

Denmark's exports of fresh and frozen fillets and blocks during the first seven months of this year were 17.4 percent greater than in the same period of 1961, mainly because of an increase of 163.9 percent in exports of herring fillets. Exports of flounder and sole fillets increased 13.4 percent, but exports of cod and related species declined 7.3 percent. During the first seven months of this year exports to the United States of fresh and frozen fillets and blocks of about 9.1 million pounds (mostly cod and related species) were up 2.3 percent from the exports of about 8.9 million pounds in the same period of 1961.

Denmark's exports of fresh and frozen fish fillets and blocks during July 1962 were 21.9 percent above exports in the same month in 1961. Of the total exports, about 0.7 mil-

lion pounds (mostly cod and related species) were shipped to the United States in July.

Product	July		Jan.-July	
	1962	1961	1962	1961
..... (1,000 Lbs.) .....				
<b>Fillets and Blocks:</b>				
Cod and related species.	1,814	2,325	21,126	22,799
Flounder and sole . . . .	3,121	2,619	14,568	12,851
Herring . . . . .	1,717	406	12,051	4,567
Other . . . . .	28	128	447	828
Total . . . . .	6,680	5,478	48,192	41,045
..... (Short Tons) .....				
<b>Industrial Products:</b>				
Fish meal, fish solubles, and similar products . .	7,221	4,737	39,131	26,784

1/Shipments from the Faroe Islands and Greenland direct to foreign countries not included.

Denmark's exports of fish meal, fish solubles, and similar products in January-July 1962 were 46.1 percent greater than in the same seven months a year earlier.

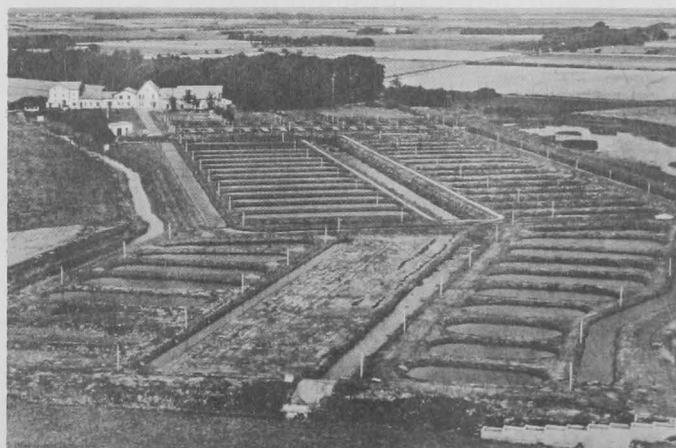
During July 1962, Denmark's exports of fish meal, fish solubles, and similar products were 52.4 percent above the amount shipped out in the same month of 1961. The principal buyers were the United Kingdom and West Germany.

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TO MANUFACTURE FOOD FOR RAINBOW TROUT GROWERS:

Food for rainbow trout, formerly imported by Denmark from the United States, will now be manufactured in that country. The fish food is used by the Danish pond trout industry, according to the United States Regional Fisheries Attache. A group of Danish brook trout growers recently formed a share company, on a license basis, to make food for rainbow trout. The plant will be located in Herning, a small town in the trout-growing area of Jutland. It had not been decided whether to build, buy, or rent a factory, but the mid-Jutland site was chosen because it would be easier to ship the product to trout pond operators throughout that area. The chairman of the new enterprise is the owner of a trout farm having 250 ponds, and is also head of Danish Cooperative Trout Export. Shares in the new company amounting to 200,000 kroner (US\$29,000) already have been subscribed by trout pond operators, and the total investment in the firm is expected to be 500,000 kroner (\$72,400).

Denmark has imported about 500 metric tons of United States-produced trout food annually. When the new Danish



A pond trout enterprise in Denmark.

## Denmark (Contd.):

company gets into full operation, the annual production will be about 10,000 tons, enough to cover two-thirds of the Danish demand for trout food. The price is expected to be cut in half from what it was formerly.

In May 1962, Danish trout-growers were successful in having the Folketing (Parliament) change a law permitting imports of fish food after furnishing the Ministry of Fisheries full information on its composition, but not requiring as was formerly the case, that the composition be disclosed to buyers of the product. The Danish pond trout industry wanted the law changed because the United States manufacturer of the fish food did not want to reveal the exact composition of his product for competitive reasons. The United States-produced fish food was found to be especially suitable in raising Danish rainbow trout.

Trout food is manufactured by a special process, and United States biologists have worked on its composition for 20 years. Attempts have been made in Denmark to put out a similar fish food, but the drawback was that it was not possible to analyze the composition of the product imported from the United States. The result was the purchase of rights from the United States firm to manufacture the product in Denmark. The owner of the United States firm was in Denmark this past summer to conclude the licensing negotiations which involved an advance payment of \$10,000, and a subsequent 6 percent royalty on all sales.

A large proportion of the 600 Danish trout pond operators already use the food for fry, and also for trout raised for stocking purposes. But it is now believed that the product can be used for the entire trout output. According to the head of the new Danish fish food firm, that type of fish food produces the healthiest trout specimens. A so-called "wet food" was used by the Danish trout growers before they started importing the dry fish food some 5 years ago. About twice as much dry food will be fed the trout. The dry food is easier to handle, and the trout pond can be operated with less labor. If a trout pond operator shifts over to dry food for his entire production, he can figure that his fish food costs will balance out. (European Regional Fisheries Attache, United States Embassy, Copenhagen, August 1, 1962.)

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## FISHERIES TRENDS, JANUARY-JUNE 1962:

Summary: Denmark's landings and exports of fishery products in the first half of 1962 were at record levels. Industrial fish prices were up slightly, but there had been no agreement on minimum prices for plaice. For the first time countries in the European Economic Community (EEC) are buying more Danish fishery products than countries in the European Free Trade Association (EFTA). Four Danish vessels may go to the Philippines to fish sardines for a United States company. Two of four freezer-ships for the U. S. S. R. have been launched in Copenhagen. A fish processing plant with a daily capacity of 40,000 pounds of fish fillets and a fish reduction plant are planned for Greenland. Denmark was not invited to the first Common Market fisheries policy meeting of EEC countries. But Denmark's largest fisheries association has asked to have an observer at the next meeting of the European Federation

of Fishing Enterprises (EUROPECHE). Another International Fisheries Fair is planned for Copenhagen in 1964. Increased United States exports to Denmark are not probable. Fishing limits discussions are quiet.



Fig. 1 - Drying plaice. The fishery for plaice is the most valuable in Denmark. Plaice is marketed alive in fish shops throughout Denmark, but sales of plaice fillets are increasing yearly--production in 1960 reached 24,000 metric tons.

Landings: Landings by Danish vessels in the first half of 1962 were 27 percent greater than in the same period of the previous year and 6 percent greater than in the first half of



Fig. 2 - Part of the harbor of Hvide Sande on the west coast of Jutland, Denmark. Landings at this port consist mostly of plaice and herring.

the record year 1959. The increase in 1962 landings would be even more impressive if landings in Denmark by foreign vessels were considered. Heavier landings of industrial fish accounted for most of the increase. A slight increase in industrial fish prices helped attract vessels to the fishery. In June, the arrival of industrial fish at Esbjerg, Denmark's largest port, was so great, 500 tons or more had to be dumped at sea.

## Denmark (Contd.):

Table 1 - Danish Fisheries Catch,  
January-June 1962, 1961, and 1959

Species	January-June		
	1962	1961	1/1959
	..... (Metric Tons) .....		
Landings in Denmark by Danish Vessels:			
<b>Salt-Water Fish:</b>			
Plaice .....	19,883	19,122	12,284
Cod .....	39,277	40,818	36,665
Herring .....	85,353	70,144	112,351
Other salt-water fish <sup>2/</sup> ..	178,384	123,555	139,752
Total salt-water fish ..	322,897	253,639	301,052
<b>Fresh-Water Fish:</b>			
Pond trout .....	3,537	3,679	3,506
Fresh-water fish .....	1,349	1,251	1,230
Total fresh-water fish ..	4,886	4,930	4,736
<b>Shellfish:</b>			
Mussels & starfish .....	8,036	5,885	11,570
Shrimp and other shellfish	2,970	2,462	1,761
Total shellfish .....	11,006	8,347	13,331
Total fish and shellfish ..	338,789	266,916	319,119
Landings in Denmark by Foreign Vessels .....	44,078	25,341	33,164
Danish landings in foreign ports of United Kingdom, Sweden, & Holland .....	2,355	5,149	2,322

1/Year of record total catch which amounted to 667,800 metric tons valued at 370.2 million kroner (US\$53.6 million).  
2/Mostly industrial fish.  
Source: Ministry of Fisheries.

**Minimum Ex-Vessel Prices:** The plan for minimum ex-vessel prices for plaice and other species remains in the talking stage. The minimum ex-vessel price plan calls for prices to be supported by Government and industry through a pool arrangement. The Danish Fisheries Association supports the plan, but the next largest group, the West Jutland Association, is less enthusiastic.

**Exports:** Total exports of fishery products in the first half of 1962 were greater than in the same period of the record year 1961. The increase was 16 percent in value and 7 percent in quantity. Fishery exports to the United States increased 26 percent in value due mainly to larger shipments of canned herring (up 357 percent in value) and frozen spiny lobsters (up 110 percent in value). But the value of pond trout exports to the United States in 1962 dropped 36 percent, and this means better markets are being found nearer Denmark.

Denmark's exports of fishery products to European Common Market countries in the first 5 months of 1962 were 10 percent above exports to EFTA countries. Denmark is a member of the EFTA. Denmark's exports of fishery products to EEC countries in the first 5 months of 1962 were 50 percent greater than in the same period of 1961, while exports to EFTA countries increased by only about 15 percent.

Table 2 - Danish Fishery Exports, January-June 1961-1962

Products	January-June					
	1/1962			1961		
	Quantity Metric Tons	Value		Quantity Metric Tons	Value	
		1,000 Kroner	1,000 US\$		1,000 Kroner	1,000 US\$
All Countries:						
Fish and fish products	136,350	250,790	36,365	127,704	216,459	18,518
United States:						
Pond trout .....	347	2,648	384	543	4,135	600
Cod fillets, frozen ..	3,669	11,111	1,611	3,305	9,922	1,439
Lobster, frozen .....	96	1,972	286	63	941	136
Herring, canned .....	1,288	4,541	658	161	997	144
Other .....	442	2,654	385	722	2,198	319
Total exports to the United States .....	5,842	22,926	3,324	4,794	18,193	2,638

1/Preliminary data.  
Note: One Danish krone equals US\$0.145.  
Source: Ministry of Fisheries.

**Plans For Joint Danish-American Fishing Venture in the Philippines:** Several Skagen fishermen are negotiating a contract with a United States company to take four Danish cutters to the Philippines to fish for sardines. The catches would be landed at a Philippine plant for reduction and canning.

**Freezer Mothership Vessels Built for U.S.S.R.:** Two of four freezer motherships constructed in Copenhagen for the U.S.S.R. were launched in the second quarter of 1962. The 2,600-ton vessels will dress and freeze--but not fillet--the catch of accompanying fishing vessels. Detached cod ends will be hauled aboard over a stern slipway.

**Processing and Marketing:** A new fisheries enterprise has been planned for Godthaab, Greenland. Financial backing in the amount of 7.5 million kroner (US\$1.1 million) will come from Denmark, the Faroe Islands, and the Royal Greenland Trade Department. Plans called for construction of a fillet plant with a daily capacity of 40,000 pounds in the summer of 1962. Machinery is to be installed during the winter and operations will begin August 1, 1963. A fish reduction plant is also planned for Godthaab.

The last reports concerning the cooperative filleting plant which fishermen are hoping to establish in Esbjerg state that 800,000 kroner (US\$116,000) of the one million kroner (US\$145,000) needed has been pledged.

Tests to determine whether quality is materially affected, if fillets are prepared from frozen fish, have been started at the Technological Research Laboratory of the Ministry of Fisheries in Copenhagen. The tests are expected to be completed late in 1962.

Findus International, Ltd., a new Swiss-Norwegian-Swedish frozen foods company, was established in May 1962. The new Company took over all operations in Scandinavia of the North Norway fish deep-freezing firm

## Denmark (Contd.):

A/S Findus including a large modern fish filleting plant at Fredrikshavn, Denmark, which employs 300 people. Findus International, Ltd. plans to expand. In a recently issued booklet, The Findus Saga, the company estimates that more than 200,000 shops in Western Europe now sell about 300,000 metric tons of frozen foods. In 1970, it is expected that 400,000 to 500,000 shops will sell from one million to 1.5 million tons. In Sweden, Findus maintains storage temperatures of at least  $-4^{\circ}$  F. throughout the distribution chain and  $-22^{\circ}$  F. in its main depots. It designed the Polar Reefer, the first ship built exclusively for transporting pallet loads of frozen foods. The Polar Reefer's capacity is 550 tons at  $-13^{\circ}$  F. Current Findus production is reported to be about 40,000 tons annually, consisting of about 100 products.

European Economic Community: The Danish fishing industry is awaiting the development of a European Common Market fisheries policy with considerable interest. Disappointment was expressed at the recent announcement that the Common Market countries will meet this fall before conferring with Denmark, Norway and the United Kingdom in regard to fisheries matters.

The Danish Fisheries Association with a membership of about 11,000 from 175 local groups has applied to EUROPECHE, the federation of national fisheries associations in Common Market countries, for the privilege of sending an observer to the next EUROPECHE meeting.

Fairs and Exhibits: Sponsors of the Fourth International Fisheries Fair which was held in Copenhagen April 1962 have announced that the Fifth International Fisheries Fair will be held September 4-13, 1964.

Imports from United States: There is little opportunity for United States firms to sell more fishery products in Denmark. U. S. distributors visiting Denmark believe frozen scallops might find a larger European market, possibly including Denmark.

Fishing Limits: There have been no further official pronouncements on progress or developments in regard to negotiations over fishing limits around the Faroe Islands since Denmark gave notice to the United Kingdom on April 28, 1962, of termination of the 1959 agreement on fishing limits in the Faroes.

Industry and government views expressed in the press in regard to an extension of Denmark's own fishing limits agree that no change should be sought while the Danish application to join the Common Market is pending. (European Fisheries Attache, United States Embassy, Copenhagen, August 15, 1962.)

Notes: (1) See Commercial Fisheries Review, Sept. 1962 pp. 69-70, Aug. 1962 p. 59; July 1962 pp. 61 and 88; June 1962 p. 47; March 1962 p. 37; Feb. 1962 p. 64.

(2) Values converted at rate of one Danish krone equals US\$0.145.



## Faroe Islands

FISHERIES TRENDS,  
EARLY SEPTEMBER 1962:

Marketing Frozen Fillets: The fishing industry in the Faroe Islands is concerned over reports of sharply decreased sales of frozen fillets, mainly cod and haddock, in the United Kingdom. About 500 metric tons of fillets have been exported this year at profitable prices through the Faroese sales organization in Thorshavn and a large British importing firm in Grimsby, England, the United States Regional Fisheries Attache stationed at Copenhagen reports. Faroese newspapers report that the senior officer in the British importing firm has stated that his company's refrigerated warehouses are filled with quick-frozen fillets which they have been unable to move at prices competitive with the iced fish still favored by many British housewives. British imports of Faroese frozen fillets are not expected to stop completely but they may be curtailed.

An especially large number of vessels had been expected to participate this fall and winter in the Faroese local long-line fishery for cod and haddock for delivery to the British market. The United States has imported Faroese fishery products in the past and is now being mentioned as a market for this year's production of frozen fillets.

The total production of fillets in the Faroe Islands was 1,585 tons in 1961, 1,223 tons in 1960, and 571 tons in 1959, according to the Faroese release, "Faroese in Figures," No. 18, June 1962.

Salted Herring: Despite favorable weather, only 43,700 barrels of salted herring had been landed in Faroese ports by September 1, 1962, as compared with 79,300 barrels by the same date last year. The Faroese herring

## Faroe Islands (Contd.):

sales organization has arranged salted herring sales contracts calling for the delivery of 70,000 barrels to Sweden, 20,000 barrels to Denmark, and 3,000 barrels to East Germany. In order to meet the contracts, an extra effort was going to be made to increase the herring catch between mid-September and the beginning of October. That period is the last, but usually the best, part of the herring season. (September 19, 1962, report from the Fisheries Attache, United States Embassy, Copenhagen.)



## German Federal Republic

## JAPANESE CANNED TUNA PRICES:

In mid-September 1962, Japanese canned tuna price quotations to West German importers for light meat solid pack tuna in cottonseed oil, c.i.f. West German ports, were:

Bluefin: (48 3½-oz. cans) . .	\$4.17 a case
(48 7-oz. cans) . .	\$7.10 a case
Skipjack or yellowfin:	
(48 7-oz. cans) . .	\$7.30 a case

German importers expect little change from the above prices in the near future. The canned tuna products described above make up the bulk of West German imports of canned tuna from Japan. Chunk style tuna and tuna packed in brine are imported only occasionally. (United States Embassy, Bremen, September 14, 1962.)



## Greece

## NEW MECHANICAL DEVICE FOR HAULING IN PURSE-SEINE NETS INVENTED BY SHIPOWNER:

A new mechanical device for hauling in purse-seine nets was recently installed in a Greek purse-seiner. It was reported as giving satisfactory results. The device, which was invented by a Greek shipowner, consists of one pulley which is hung from a mast at the vessel's center towards the stern. A screw inside the mast starts the pulley operating. The pulley, together with a clutch located inside the vessel, is powered by the main engine.

The pulley is made of hard aluminum and has an open space of 45 centimeters (17.7 inches). The inside of the pulley is rubber-coated. As it turns, the net is hauled in without causing the slightest damage to the mesh.

By using this device, a purse seine 1,800 feet long and about 400 feet deep has been hauled in full of fish in 18 to 22 minutes with the aid of only 3 men.

The Greek purse-seiner using the new invention is owned and operated by the inventor. In 20 days of fishing, the vessel caught 88,000 pounds of fish which was considered an achievement in the Greek commercial fishery.

The operation of the new mechanical device was hailed as significant in Greece's fishing industry. It was pointed out that it was inspired by an entirely different concept from that of the "power block" used in the United States tuna fishery. (Alieia, Athens, Greece, August 1962.)

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## FREEZER-TRAWLER FLEET EXPANDED:

Another freezer-trawler, the Zephyros IV, was added to Greece's Atlantic fleet of freezer-trawlers in August 1962. This brings the Greek freezer-trawler fleet engaged in the Atlantic fishery to 17 vessels of that type. The vessel was bought in Germany, and underwent extensive modifications at Piraeus under the technical supervision of one of Greece's foremost fishing firms. The new vessel is the fourth of that type owned by the firm.

The Zephyros is 144 feet long by 26 feet broad, has a depth of 14 feet, and is 399 gross tons. Its main engine is 820 horsepower, and during her trials, the vessel developed a speed of 12¼ knots.

The new vessel is capable of freezing 12 metric tons of fish every 24 hours at -45° C. (-49° F.), and its holding capacity of frozen fish is 170 tons at -25° C. (-13° F.).

The day following her dedication, the vessel left for the Mauretania fishing grounds with a crew of 26.

In July 1962, 4 Greek freezer-trawlers landed 1,191 metric tons of frozen fish, as against 6 vessels with 1,850 tons the previous month. In July 1961, 4 vessels of this type brought in 1,055 tons of frozen fish. In the period January through July 1962,

## Greece (Contd.):

Greek freezer-trawlers landed 8,672 tons of frozen fish as compared with 7,543 tons in the same period of 1961. (Alieia, Athens, Greece, August 1962.)

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NEW FISH CANNERY TO BE BUILT:

The construction of a large fish cannery is planned for Cavalla in eastern Macedonia, an important fishing center in Greece. The plant is expected to be able to process from 800 to 1,000 metric tons of fish annually, mainly sardines and anchovies.

The proposed cannery will be an enterprise operated mainly by owners of local salt-fish plants and Cavalla fishing boat owners, who will be sold proportional shares of stock. (Alieia, Athens, Greece, August 1962.)



## Guatemala

JOINT JAPANESE-GUATEMALA FIRM FISHING SHRIMP OFF CENTRAL AMERICA:

The shrimp fishing operation along the coast of Guatemala, Central America, jointly carried out by a Japanese firm and local Guatemala interests, has been using 14 vessels and some chartered vessels. Fishing conditions were reported favorable in August 1962.

The joint company has decided to add six more vessels, thus expanding its fleet to 20 vessels by November in an effort to increase catches. The six vessels are now under construction at a shipyard in Jacksonville, Fla., and they are of the 50-ton class. (Suisan Tsushin, August 30, 1962.)



## Iceland

FISHERIES TRENDS, EARLY SEPTEMBER 1962:

Summer Herring Fishery: A record catch of 311,838 metric tons of herring valued at 392.9 million kronur (US\$9.1 million) had been landed off the north and east coasts by September 9, 1962, as compared with 211,136 tons caught by the same date during last

year's good season. The 1962 summer herring fishery is about over, but south coast herring operations could not begin because no price had been set for landings there. As many as 235 vessels took part in the summer herring fishery this year. The average share of the catch for deckhands amounted to 58,892 kronur (US\$1,368) and, for skippers, 148,073 kronur (US\$3,439).

Herring Salting: Summer herring salting was resumed August 25, because of the possibility of a new contract for 20,000 barrels with the U. S. S. R. Salting had been shut down temporarily since August 19, because all existing contracts for summer herring were filled.

The first contract for salted herring from the anticipated south coast winter catch was signed and it provided for delivery of 25,000 barrels of specially-cured split herring to West Germany.

Other Fisheries: The off-shore trawlers continued bringing in good catches (principally of ocean perch). They were fishing off western Greenland and, to a limited extent, off Newfoundland. The 15 trawlers operating off Iceland reported rather poor catches of cod and haddock. An Icelandic fisheries scientist was quoted in the British Fishing News as saying that Iceland's extension of its fishing limits has had an extremely beneficial effect upon fish stocks off the Icelandic coast where the small fishing vessels have done well. He predicted that before long the increased fish stocks would move outward where the trawlers would benefit.

The lobster catch was very good and was expected to exceed considerably last year's catch of 2,000 tons. (United States Embassy, Reykjavik, August 31, and September 14, 1962.)

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SEEKS U. S. LOAN TO AID FISH-PROCESSING PLANTS:

The Icelandic Government has requested a loan of 29 million kronur (US\$673,478) from the United States from the 1961 and/or 1962 U. S. Public Law 480 (Agricultural Trade Development and Assistance Act of 1954) agreements. Iceland asked that the loan be made to the Icelandic Development Bank for the Fisheries Loan Fund. Iceland's Fisheries Loan Fund would use the money mainly to increase loans to fish processing plants. U. S. loan under Public Law 480 would be made in Icelandic kronur rather than in U. S. dollars.

Iceland's Fisheries Loan Fund has been used mainly to improve the fishing fleet. By now increasing fish processing facilities through loans, Iceland hopes to add value to fish exports, which make up 93 to 96 percent of its tangible exports. It is estimated that a large part of loans to fish processing plants (freezing plants, oil and meal plants, salt fish plants)

Iceland (Contd.):

would be absorbed by local costs, such as labor, supplies, and construction material. Less than a third would go for machinery such as boilers, motors, filleting machines, conveyor belts, and refrigeration units.

The United States has already used the authority of Public Law 480 to aid Iceland's Industry Loan Fund. This fund makes modest loans to individual manufacturers to purchase machinery. The Industry Loan Fund loaned 4.4 million kronur (US\$102,183) in 1960. The Fisheries Loan Fund has a far greater scope and loaned 182.9 million kronur (US\$4.2 million) in 1960.

Part of a statement by the Government of Iceland describing the Fisheries Loan Fund follows:

**History and Operations of the Fund:** The Fisheries Loan Fund was established by law in 1905 for the purpose of promoting the development of fisheries in Iceland with loans for purchase of new fishing vessels. At that time a breakthrough was taking place in Icelandic fisheries as the first motor boats were introduced. The Fund was later authorized to grant loans for construction of fish-processing plants as processing of fish became more important.

The Fund grants loans to a maximum of 75 percent of the purchase price of new fishing vessels. The loans are repaid in 15 years with 6-1/2 percent interest. Equipment loans are of shorter duration. The maximum amount loaned for processing plants is 60 percent of construction costs, which must be repaid within 12-15 years.

**Sources of Income:** The main source of income to the Fund is a 1.8-percent levy on exports of fish and fish products, which yielded 35.3 million kronur (US\$819,786) in 1961. Interest on loans (gross) amounted to 15.4 million kronur (US\$357,640). The Fund receives besides this an annual Government grant of 2.0 million kronur (US\$46,447). The debts of the Fund consist almost entirely of long-term foreign credits.

**Loan Operations in Recent Years:** Loan operations increased sharply in 1960 and continued at the higher level in 1961 and 1962. New and larger steel vessels were bought to replace smaller wooden ones. Operators started to equip their boats with a new and more efficient technique for catching herring. The Fund's current resources were not sufficient to meet the heavy demand for loans so in 1961 long-term loans were taken by the Fund.

**Operations in Period Ahead for which Additional Financing Sought:** Great technical changes have been taking place in fishing in recent years requiring large investments in new equipment. It is therefore of great importance to finance such equipment on a fairly large scale. At the same time it is becoming important to invest more in fish-processing plants both to improve efficiency and make it possible to receive the larger catches now being landed. Here the main emphasis will be on freezing plants and herring processing plants.

The larger part of the resources of the Fund will continue to be used for financing new boats built abroad. Additional financing to the amount of 29 million kronur (US\$673,478) is sought in order to make it possible for the Fund to meet other urgent needs of the fishing industry. It is planned to use the requested funds for the following categories of loans:

1. Loans to fish-processing plants to enlarge capacity and install more modern machinery.
2. Loans for new equipment and modernization of fishing boats in order to reap the benefit of new fishing techniques.
3. Loans to finance the building of fishing boats in Icelandic yards. These are mostly the smaller type wooden boats used for inshore fishing. (United States Embassy, Reykjavik, September 19, 1962.)

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EXPORTS OF FISHERY PRODUCTS, JANUARY-JULY 1962:

During January-July 1962, there was a considerable increase in exports of frozen herring, frozen fish fillets, salted herring, herring oil, and herring meal as compared with

Product	Jan.-July 1962			Jan.-July 1961		
	Qty.	Value f.o.b.		Qty.	Value f.o.b.	
	Metric Tons	1,000 Kr.	US\$ 1,000	Metric Tons	1,000 Kr.	US\$ 1,000
Salted fish, dried . . . . .	1,370	26,402	613	2,807	52,481	1,375
Salted fish, uncured . . . . .	22,449	273,931	6,355	22,173	222,334	5,825
Wings, salted . . . . .	983	11,271	261	1,250	11,517	302
Stockfish . . . . .	5,691	145,877	3,384	6,062	139,640	3,659
Herring on ice . . . . .	4,899	17,144	398	3,754	9,630	252
Other fish on ice . . . . .	13,932	63,839	1,481	16,660	70,524	1,848
Herring, frozen . . . . .	16,047	87,423	2,028	10,069	48,151	1,262
Other frozen fish, whole . . . . .	973	12,915	300	736	7,729	202
Frozen fish fillets . . . . .	32,575	560,480	13,003	22,955	346,692	9,083
Shrimp and lobster, frozen . . . . .	195	16,758	389	255	18,477	484
Roes, frozen . . . . .	617	11,770	273	504	6,547	172
Canned fish . . . . .	155	7,874	183	119	7,640	200
Cod-liver oil . . . . .	2,767	22,097	513	2,447	19,806	519
Lumpfish roes, salted . . . . .	362	5,625	131	394	6,560	172
Other roes for food, salted . . . . .	2,743	37,899	879	2,468	24,897	652
Roes for bait, salted . . . . .	956	6,112	142	976	5,511	144
Herring, salted . . . . .	17,670	161,937	3,757	11,561	95,084	2,491
Herring oil . . . . .	19,917	85,740	1,989	4,988	26,883	704
Ocean perch oil . . . . .	15	59	1	196	1,109	29
Whale oil . . . . .	388	2,558	59	917	6,452	169
Fish meal . . . . .	17,879	112,062	2,600	24,401	93,886	2,460
Herring meal . . . . .	23,517	150,592	3,494	12,900	57,701	1,512
Ocean perch meal . . . . .	34	204	5	1,898	6,954	182
Wastes of fish, frozen . . . . .	2,639	6,487	150	5,247	9,924	260
Liver meal . . . . .	195	1,285	30	235	1,287	34
Lobster and shrimp meal . . . . .	-	-	-	249	540	14
Whale meal . . . . .	402	2,151	50	1,192	4,168	109
Whole meat, frozen . . . . .	1,162	9,046	210	315	2,090	55

Note: Values converted at rate of 1 kronur equals 2.32 U. S. cents in 1962 and 2.62 U. S. cents in 1961.

the same period in 1961, according to the Statistical Bureau of Iceland's Statistical Bulletin, August 1962. Exports of fish meal and ocean perch meal showed a considerable decrease in the first seven months of 1962.

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UTILIZATION OF FISHERY LANDINGS, JANUARY-MAY 1962:

How Utilized	January-May	
	1962	1961
	.. (Metric Tons) ..	
<b>Herring<sup>1/</sup> for:</b>		
Oil and meal . . . . .	57,924	19,275
Freezing . . . . .	13,585	7,416
Salting . . . . .	4,832	6,037
Fresh on ice . . . . .	7,718	4,119
Canning . . . . .	69	-
<b>Groundfish<sup>2/</sup> for:</b>		
Fresh on ice landed abroad . . . . .	12,522	13,523
Freezing and filleting . . . . .	74,853	80,462
Salting . . . . .	59,625	51,408
Stockfish (dried unsalted) . . . . .	29,918	40,384
Home consumption . . . . .	4,361	3,395
Oil and meal . . . . .	974	1,449
<b>Shellfish for:</b>		
Freezing: Lobster . . . . .	122	252
Shrimp . . . . .	263	304
Canning (shrimp) . . . . .	86	126
<b>Total production . . . . .</b>	<b>266,852</b>	<b>228,150</b>

1/Whole fish.  
2/Drawn fish.

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Iceland (Contd.):

**FISHERY LANDINGS BY PRINCIPAL SPECIES, JANUARY-MAY 1962:**

Species	January-May	
	1962	1961
	..(Metric Tons) ..	
Cod . . . . .	141,258	143,420
Haddock . . . . .	14,447	15,836
Saithe . . . . .	5,561	4,238
Ling . . . . .	4,065	3,321
Wolfish (catfish) . . . . .	8,659	8,091
Cusk . . . . .	3,517	3,438
Ocean perch . . . . .	2,656	9,976
Halibut . . . . .	523	595
Herring . . . . .	84,129	36,847
Shrimp . . . . .	349	430
Other . . . . .	1,688	1,958
Total . . . . .	266,852	228,150

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



**Japan**

**TENTH SALE OF CANNED TUNA IN BRINE FOR EXPORT TO THE U.S.:**

The Japan Canned Foods Exporters Association convened a meeting of its Canned Tuna Sales Standing Committee on September 18, 1962, and approved the tenth sale of canned tuna in brine for export to the United States. A total of 130,000 cases (48 7-oz. or No. 1/2 cans per case) of tuna packed in brine (consisting of 75,000 cases of white meat and 55,000 cases of light meat tuna) were approved for this sale, with deliveries to be completed by November 24. Export prices per case remain unchanged: white meat US\$10.40; light meat \$7.80 a case, f.o.b. Japan.

Japanese export of canned tuna in brine to the United States up to and including the tenth sale will total 2,073,000 cases, consisting of 1,178,000 cases of white meat and 895,000 cases of light meat tuna. (Suisan Tsushin, September 20, 1962.)

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**PACKERS SEEK REMOVAL OF RESTRICTIONS ON U. S. IMPORTS OF CANNED TUNA:**

The Japanese periodical Nihon Suisan Shimbun of October 8 reports that the Japan Canned Tuna Packers Association petitioned the Fisheries Agency to negotiate, during the meeting of the Japan-United States Joint Committee on Trade and Economic Affairs

slated to be convened in Washington, D. C., in November 1962, for removal of restrictions placed by the United States on imports of Japanese canned tuna. The Canned Tuna Packers Association is reportedly seeking removal of the 12.5-percent tariff imposed by the United States on imports of tuna packed in brine and the reduction of the United States tariff on imports of tuna packed in oil from the present 35 percent to 12.5 percent.

According to the Japanese periodical, the existing United States tariff quota exerts a tremendous effect on Japan's canned tuna exports. Originally, the United States tariff quota on imports of canned tuna in brine was established in 1955 only to regulate imports from Japan, but, subsequently, European countries also began to export canned tuna in brine to the United States at lower prices than Japan, thus needlessly increasing price competition in marketing that product.

The percentage of United States imports of Japanese tuna packed in brine has declined yearly during the past five-year period, from 94.24 percent in 1957 to 79.94 percent in 1961 as shown in table.

Percentage of United States Imports of Japanese Tuna Packed in Brine	
Year	Percentage of Imports from Japan
	%
1961 . . . . .	79.94
1960 . . . . .	83.35
1959 . . . . .	80.58
1958 . . . . .	89.01
1957 . . . . .	94.24

The United States does not apply quota restrictions on imports of tuna packed in oil but assessment of an import duty of 35 percent ad valorem virtually precludes the possibility of foreign countries exporting canned tuna in oil to the United States, reports the Japanese periodical. (Nihon Suisan Shimbun, October 8, 1962.)

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**CANNED TUNA INDUSTRY TRENDS, AUGUST 1962:**

Although poor summer albacore tuna fishing has resulted in a light pack of white meat for export to the United States, good skipjack fishing has increased the ratio of the pack of light meat.

As of early August, a fairly large quantity of albacore tuna was expected to be canned since good albacore fishing was reported in

## Japan (Contd.):

the Indian Ocean. At least 200,000 to 300,000 cases of white meat are expected to be packed from Indian Ocean albacore.

Assuming that about the same quantity will be packed from winter albacore, it may be possible that half of this year's production quota of 2.4 million cases will be white meat, including some 650,000 cases already sold. But the pack of light meat from now on depends largely on landings and ex-vessel prices of skipjack. Also, this year's skipjack are small, requiring more processing time. If Indian Ocean albacore can be bought for \$352 per metric ton, some packers may prefer to use albacore instead of restricting their pack to skipjack.

Some 330,000 cases (excluding the 8th sale) of white meat tuna were in stock at the sales company as of early August. It is expected that the 9th through the 11th sales can be adequately taken care of with the present white meat stocks. (Suisan Tsushin, August 6, 1962.)

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#### CLAIMS MOUNT AGAINST JAPANESE FROZEN YELLOWFIN TUNA EXPORTS TO THE UNITED STATES:

A JETRO (Japan Export Trade Promotion Association) report reveals that claim problems against Japanese frozen yellowfin tuna exported to the United States are common occurrences now. A United States cannery which recently imported 70 tons of frozen yellowfin tuna from Japan reportedly claimed a price adjustment for approximately 20 percent of the shipment because of the dark color of the tuna meat, because the packer had to pack them as grated tuna.

A similar claim was made by another United States packer against Japanese frozen yellowfin tuna loins delivered in August 1962. The loins were generally inferior in color quality, except for a small percentage which retained the normal color of tuna loins. The packer reportedly demanded a \$40 per ton discount for the shipment, claiming that the dark meat tuna loins delivered would have to be packed as second grade tuna, and warned that all further contracts would be cancelled unless this condition was met.

In view of the problems that have arisen out of exports of inferior quality loins, Japan

must enforce a more rigid quality control and establish a quality grading system, reports the Japanese periodical Nippon Suisan Shim-bun, October 1, 1962.

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#### SLUGGISH FROZEN TUNA MARKET CAUSES CONCERN:

The Japan Frozen Foods Exporters Association held a meeting of its Atlantic committee in mid-September 1962 to discuss the sluggishness of frozen tuna exports to the United States. No conclusion was reached at the meeting. Most of those present seemed to agree that the situation could be eased a little by concentrating their efforts on exporting to the European market. Market conditions in Europe for frozen tuna are considered more favorable than in the United States. Some expected a plan for each exporter to independently regulate exports to the United States, but it was unanimously agreed not to suggest a temporary withdrawal of offers.

The United States is the largest market for Japanese frozen tuna. Between April and July of 1962, more than 20,000 short tons were licensed for export to the United States. The price during that period reached \$375 per short ton f.o.b. Japan for yellowfin tuna weighing 20-80 pounds. By the end of July, however, the market became weak and as of mid-September no sales were reported completed. In many cases, offers were made at prices less than \$300 per ton f.o.b. Japan for yellowfin tuna.

Under the circumstances, the Export Frozen Tuna Fisheries Association and the Japan Frozen Foods Exporter Association were trying to find some means to cope with the sluggish tuna market.

Contracts were being concluded around future delivery orders, some of which were as late as for January 1963. The industry was trying to find some way of alleviating the situation. Some of the suggestions were: (a) land more of the catch in Japan by chartering carriers, (b) store catch in local cold-storage plants and wait for improvement of market conditions, and (c) concentrate on exports to Europe. Demand in Japan was still strong and the ex-vessel price was high compared with the sluggishness of the export market. Exports to Europe were still reported at \$400 c.i.f. a long ton on yellowfin tuna. The industry was of the opinion that exports to Europe may be continued at a high level even

## Japan (Contd.):

though exports to the United States have dropped off because at the time there was still a shortage of raw tuna in Europe. (Suisan Keizai Shimbun, September 18, 1962.)

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## SECOND JAPAN-UNITED STATES TUNA MEETING AS REPORTED BY JAPANESE:

The second Japan-United States tuna conference convened on October 9, 1962, in the conference room of the Japanese Foreign Ministry. The meeting opened with a speech of welcome by the Japanese Ambassador Yagi to Iraq, representing Japan, followed by addresses delivered by the United States Delegate, Assistant Secretary of the Interior for Fish and Wildlife Briggs, and Japanese Minister of Agriculture and Forestry Shigemasa. Delegates of the United States and Japan were then introduced, and the Japanese senior delegate, Yagi, was elected chairman of the meeting. Gist of the speeches delivered by the three delegates is as follows:

Yagi: "The tuna fishery occupies a particularly important place in the fishing industry. Japan presently exports much of her frozen tuna and canned tuna to the United States. It is my sincere desire that this second tuna meeting between the two closely interrelated countries of the United States and Japan will, through frank discussions of tuna problems and exchange of information and data on tuna, contribute to the enhancement of friendly, cooperative relationships that were established at the first tuna meeting held between the two countries."

Briggs: "This meeting is the outcome of the talk held in May this year between Secretary of the Interior Udall and former Agriculture and Forestry Minister Kono, during which an agreement was reached that, 'Friends should have a heart-to-heart talk on problems of common interest.' To the extent permitted, we would like to discuss marketing, processing, and resources, through which we hope to develop more effectively the friendly relations now existing between our two countries. At the same time, we wish to exchange views on the size of tuna resources and on the tuna industry problems confronting our two countries. Viewed from the present state of marketing and of sharing the market, this tuna meeting has an important significance for two reasons: (1) both Japan and the United States have a high tuna production capacity, (2) both nations must develop effective means by which to maintain quality, expand market, and conserve resources. Our two countries together produce approximately 80 percent of the total world tuna production. Exchange of views would be a most effective way to develop the tuna industry of our two countries. We expect this second tuna meeting to result in a free and timely exchange of tuna information and we hope for continued frank exchange of information."

Shigemasa: "In the first tuna meeting, information on tuna resources, tuna fishery, utilization, and processing was exchanged, and a deeper understanding was also gained on marketing problems. We hope that this second meeting will be a similar gathering for exchange of research data and discussions of trends and problems of fishery, marketing, and trade. In view of the high production of the tuna fishery, the Japanese Government will take measures to ensure effective and continued utilization of the tuna resources. It is particularly desirable that both Japan and the United States continue to cooperate closely hereafter in order to acquire a more accurate knowledge of tuna resources of the Pacific Ocean, which is a matter of common concern of both of our countries. We hope that, through frank exchange of views on market and on measures to be adopted for the promotion of tuna demand, the tuna trade between Japan and the United States will develop into a healthy, fair, and smooth commerce between our two countries." (Shin Suisan Shimbun Sokuho and Suisan Tsushin, October 10, 1962.)

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## REGULATIONS ON LANDING AND TRANSFER OF TUNA CATCHES RELAXED BY JAPANESE GOVERNMENT:

The Japanese Fisheries Agency announced on September 6, 1962, the revision of the regulations governing the operation of medium and distant-water tuna vessels and portable-vessel-carrying tuna motherships, as follows:

## A. Permit to Operate in Atlantic Ocean:

Medium tuna vessels (40-100 tons gross) shall henceforth not be required to submit notification of intent to operate in the Atlantic Ocean. Portable-vessel-carrying tuna motherships will be permitted to operate in the Atlantic Ocean even if they do not intend to export their catches or their processed products.

## B. Permit to Transfer Catches at Sea in Atlantic Ocean:

Licensed medium-tuna vessels and distant-water tuna vessels (over 100 tons gross) shall be permitted to transfer mutually between them their catches at sea, provided that on each occasion they obtain prior approval to do so.

## C. Permit to Ship Catches to Japan Proper:

Medium and distant-water tuna vessels, as well as portable-vessel-carrying motherships, are authorized to land or transfer their catches at foreign ports for shipment back to Japan in the following cases, provided that, in each of the cases they obtain prior approval for each landing or transfer:

1. When the landing or transfer of Atlantic Ocean-caught fish is made at ports bordering the Atlantic Ocean.
2. When the transfer of Indian Ocean-caught fish is made at Singapore or when the landing or transfer of Indian Ocean-caught fish is made at Penang.
3. When the landing or transfer of Pacific Ocean-caught fish is made at bases in the Pacific Ocean, where vessels operate under long-term contract.
4. When the landing or transfer of Pacific Ocean-caught fish is made at ports bordering the Pacific Ocean. However, in that case, those ports may be designated in advance.

## D. Landing or Transfer of Catches for Export Purposes:

Medium and distant-water tuna vessels, as well as portable-vessel-carrying motherships, are authorized to land or transfer their catches at foreign ports for export purposes in the following cases, provided that, in each case, they obtain prior approval for each landing or transfer.

1. When the landing or transfer of Atlantic Ocean-caught fish is made at ports bordering the Atlantic Ocean. However, the quantity may be stipulated.
2. When the landing or transfer of Indian Ocean-caught fish is made at Penang, or when the transfer of Indian Ocean-caught fish (frozen) is made at Singapore. However, the quantity may be stipulated.

## E. Landing and Transfer of Catches Under Long-Term Contract:

Tuna vessels under long-term (overseas) contracts may land their catches at foreign ports as follows:

1. Medium and distant-water tuna vessels, as well as portable-vessel-carrying motherships, which operate in the Atlantic Ocean, may land their catches at ports bordering the Atlantic Ocean for export to countries where tuna exports to those countries are not regulated by the Japan Export Frozen Tuna Producers Association.
2. Medium and distant-water tuna vessels may land catches taken from the Pacific and Indian Oceans in

Japan (Contd.):

countries bordering those oceans if the catches are to be consumed within those countries.

- Fishing vessels operating under long-term contracts may land their catches at foreign ports, provided their plans for landing, selling (including exporting), and shipping the catch back to Japan have been originally approved by the Minister of Agriculture and Forestry. (Suisan Keizai Shimbun, Suisan Tsushin, Japanese Periodicals, September 6, 1962.)

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**FROZEN TUNA EXPORTS TO EUROPE AND AFRICA, APRIL-JULY 1962:**

The licensed quantity of Japanese frozen tuna exports to Europe and Africa, April through July 1962, amounted to 13,384 long tons, according to Japan Frozen Foods Exporters Association. Half of the quantity (somewhat more than 9,000 tons) was for Italy. Future expansion of exports is anticipated.

Licensed quantities of Japanese frozen tuna exports to Europe and Africa by country April-July 1962 were (in long tons): Italy 9,344, Yugoslavia 3,033, France 418, Ghana 392, Czechoslovakia 192, Australia 5; a grand total of 13,384. (Suisan Keizai Shimbun, August 25, 1962.)

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**DIRECT FROZEN TUNA EXPORTS FROM ATLANTIC TUNA VESSELS TO EUROPEAN AND AFRICAN COUNTRIES, 1961:**

Japan's Atlantic tuna fleet directly exported more tuna to European and African countries in 1961 than in 1960. The increase amounted to 6.8 percent in quantity and 15.7

Direct Japanese Frozen Tuna Exports from Atlantic Tuna Vessels to European and African Countries, January-December 1961

Destination	Quantity	Value
	Metric Tons	US\$1,000
Italy . . . . .	28,956	7,308
Yugoslavia . . . . .	10,503	2,901
Tunisia . . . . .	668	180
Libya . . . . .	435	110
Spain . . . . .	770	158
Czechoslovakia . . . . .	1,957	462
Guinea and Ghana . . . . .	212	30
Total, Jan.-Dec. 1961 . . . . .	43,501	11,149
Total, Jan.-Dec. 1960 . . . . .	40,746	9,640

percent in value. Italy was the leading buyer of direct Japanese tuna exports from the Atlantic in 1961 with 66.6 percent of the total quantity.

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**ONE DISTRICT TO EXPAND SKIPJACK TUNA FISHERY:**

The Hokkaido Fisheries Society directors met early in August and decided to establish the Hokkaido Public Corporation to expand the skipjack tuna fishery. A total of US\$166,667 (\$83,333 from the Hokkaido Government and the same amount from the fisheries cooperatives) will be invested for the purpose of converting trout, herring, sardine, and other sluggish coastal fisheries, principally in the Japan Sea, to skipjack tuna fishing in order to stabilize their fishing operations. (Japanese periodical, August 7, 1962.)

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**TUNA LANDINGS BY SPECIES, 1955-61:**

Direct landings of skipjack, bluefin, albacore, big-eyed and yellowfin tuna in Japan in 1961 amounted to 438,889 metric tons, up 23.3 percent from the 355,925 tons in 1960, and up 7.8 percent from the 407,271 tons in 1959. The total landings of those tuna species in 1961 were larger than in 1960 because of heavier landings of big-eyed tuna (up 47.7 percent),

Landings in Japan of Certain Tuna Species, 1955-61

Year	Skipjack	Bluefin	Albacore	Big-eyed	Yellowfin
	. . . . . (Metric Tons) . . . . .				
1961	144,192	68,282	44,151	99,166	83,098
1960	78,546	64,449	60,721	67,124	85,085
1959	166,628	44,202	46,971	70,604	78,866
1958	147,388	21,092	46,327	70,046	76,735
1957	97,418	34,166	68,111	57,495	75,613
1956	97,976	36,919	58,654	47,074	76,875
1955	99,626	23,081	40,560	40,759	62,280

Note: Does not include direct Japanese tuna landings in foreign countries.

skipjack (up 83.6 percent), and bluefin (up 5.9 percent). The increases were partly offset by declines in the catch of albacore (down 37.5 percent) and yellowfin (down 2.3 percent).

These statistics were compiled by the Japanese Government, according to the Japanese periodical Suisan Tsushin, August 7, 1962.)

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**TUNA FISHING FORECAST FOR PACIFIC OCEAN, SEPTEMBER 1962:**

The Kanagawa Prefecture Fisheries Experimental Station late in August 1962 released its forecast of Pacific Ocean tuna fishing in September 1962.

Central Pacific (20° N. latitude-10° S. latitude, east of 150° W. longitude): In the sea area from the Equator to 10° N. latitude, big-eyed catch was expected to be high all over the area with the exception of waters around the equator and 120° W. longitude. Because the catch in the area has been decreasing yearly since 1960, there was a probability that it would be less than last year. In the sea area between 5°-10° N. latitude, a comparatively large catch of black marlin was expected.

## Japan (Contd.):

South of the Equator, roughly 4°-10° S. latitude, good catches of big-eyed tuna were expected, but the catches would be less in the area around and west of the Marquesas Islands.

East of 130° W. longitude, considerable yellowfin catches were anticipated mixed with other species.

The expected catch rate per 1,800 hooks was: 2.9 metric tons (0.8 ton of yellowfin, 1.6 tons of big-eyed, and 0.5 ton of black marlin) in the northeast sea area of the Fanning Islands; east of Christmas Island, a total of 3.1 tons (2.2 tons of big-eyed and 0.9 ton of black marlin); a total of 4.3 tons (1.6 tons of yellowfin, 2.2 tons of big-eyed, and 0.5 ton of black marlin) around 7° N. latitude, 125° W. longitude; a total of 5.7 tons (1.1 tons of yellowfin and 4.6 tons of big-eyed) around 5° N. latitude, 105° W. longitude; south of the Equator, a total of 2.9 tons (1.5 tons of yellowfin, 1.4 tons of big-eyed); in the north-eastern area of the Marquesas Islands, a total of 3.7 tons (1.4 tons of yellowfin, 2.3 tons of big-eyed); in the sea area 4°-10° S. latitude, 120°-130° W. longitude, a total of 4.3 tons (2.0 tons of yellowfin, 2.3 tons of big-eyed).

Southeastern Pacific (south of 10° S. latitude, east of 150° W. longitude): Some albacore were expected to be caught east and southeast of the Pomotu Islands. The catch in the northern area of 20° S. latitude and south was expected to be somewhat different--a catch rate of 3.2 tons (1.2 tons of yellowfin, 0.6 ton of big-eyed, 0.8 ton of albacore, and 0.6 ton of striped marlin) was expected in the northern portion of the area while in the southern portion the catch rate was expected to be 3.5 tons (1.2 tons of yellowfin, 0.6 ton of big-eyed, 1.1 tons of albacore, and 0.6 ton of striped marlin).

Northern central and Northeastern Pacific (north of 20° N. latitude, east of 170° E. longitude): Big-eyed fishing was expected to continue poor around 30° N. latitude, but catches were expected to increase in the entire area and schools were expected to appear early in September. Catch was expected to be all big-eyed with a rate of 3.0 tons around Midway and 0.5 ton north of the Hawaiian Islands, 1.5 tons east of 150° W. longitude. Also, in the northern sea area of Ocean Island, albacore was expected to be caught with big-eyed when they began to appear in September with a catch rate of 0.76 ton (0.25 ton big-eyed and 0.51 ton albacore).

Central Pacific (20° N. latitude-10° S. latitude, 150° W. longitude-170° E. longitude): A poor fishing period was expected to prevail for big-eyed in the area 5°-13° N. latitude and also 5° N. latitude-5° S. latitude. In the sea area, from Jalnit Island and the Gilbert Islands to the north of the Fanning Islands, black marlin was expected to be caught mixed with other species and some albacore was expected in the area from the Ellice Islands to the Tokelau Islands. (Japanese periodical, August 29, 1962.)

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#### ANOTHER FIRM TO START AMERICAN SAMOAN FISHING OPERATIONS IN JANUARY 1963:

Another Japanese fishing company, which earlier in 1962 received a tuna catch quota of 6,000 metric tons for its American Samoan base, plans to commence fishing operations out of Samoa in January 1963 with 22-23 fishing vessels. Of that fleet, one 85-ton vessel (Heian Maru No. 2) had already departed Japan for Samoa, ten 99-ton vessels are under construction for delivery in 1962, and the remaining 12 will be contracted with vessel owners in Japan.



Tutuila, main island of the Territory of American Samoa.

Reportedly, all catches landed by the Japanese firm's fishing vessels will be sold to the United States cannery in Samoa through two Japanese export firms: one will handle 2,000 metric tons of the catch and the second will handle 4,000 metric tons. (Shin Suisan Shim-bun Sokuho, October 3, 1962.)

Note: See Commercial Fisheries Review, July 1962 p. 77.

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#### TUNA VESSEL DEMONSTRATES EFFICIENCY OF POWER BLOCK:

A large Japanese company's surrounding-net (purse-seine) vessel Kenyo Maru (240 gross tons), which tested a United States power block, completed its second trip and returned in September 1962 to the fishing port of Shiogama in northeastern Japan with close to 25.3 short tons of skipjack tuna. The skipper commented as follows concerning the efficiency of the power block.

"The power block is a simple device and yet produces no slippage. It easily lifts the net from the water and can be adequately handled by the 18 persons we employed in the recent trial operations. Perhaps it can even be handled by 14 persons, with two men handling the float line, two on the lead line, and the remainder working the body of the net. Without the power block, a vessel of this size would have required 27 men, including the skiff men.

"The net-lift ability of the power block is indeed amazing. We pursued the surrounding net by hand, but this should be done by hydraulic winch and the net should also be made of heavier twine.

"The power block weighs 616 pounds, so it would be difficult to mount this unit on top-

## Japan (Contd.):

heavy vessels, such as the 85-ton two-boat surrounding net vessels. There is need to devise ways of using the power block even at lower positions. We tried this, but on the Kenyo Maru it would cause the power block to protrude beyond the stern.

"At full speed, the power block can lift the entire net in 20 minutes, and at slow speed in 100-110 minutes.

"After gaining more experience, we should be able to operate this unit more efficiently in offshore waters, as well as in coastal waters. In the southwest Pacific Ocean, however, the operating method would have to be improved due to different oceanic conditions." (Suisan Keizai Shimbun, Japanese periodical Sept. 12, 1962.)

Note: See Commercial Fisheries Review, September 1962 p. 89.

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TUNA INDUSTRY TRENDS:

The Japanese report that demand for tuna is expanding yearly; and the Japanese export of tuna products is going on smoothly. But the continued shortage of raw tuna is threatening to curtail Japanese production of tuna products. The Japanese tuna packers association has formed a committee to study the problem of the raw material shortage in Japan.

According to Japanese Government catch statistics for 1961, the total Japanese tuna catch amounted to some 650,000 metric tons. Complete data on how the catch was used is not available, but 150,000 tons were exported as frozen tuna. Also, some 20,000 tons of fresh tuna were exported from overseas bases. The remaining 480,000 tons were used or processed in Japan, roughly for canning, sausage manufacturing, and consumption as fresh fish.

Taking 1961, for example, the exports of canned tuna totaled some 4 million cases, so tuna used for canning can be estimated at 80,000-100,000 tons. Because of the fact that more fishing is done in distant waters--the Atlantic, Indian Ocean, and Eastern Pacific--landings in Japan are not increasing so as to keep up with the demand for raw fish.

Under the circumstances, ex-vessel prices for raw tuna in Japan have advanced considerably and the available supplies are

not adequate to meet fully the demand. In August ex-vessel prices dropped somewhat, with the price of yellowfin at US\$314-\$319 per metric ton. At this price, packers of canned tuna are breaking about even.

The study by the tuna canners association to find means to alleviate the shortage of raw tuna in Japan has not come up with any solution to date. One thing that is recognized is the need to find some way to encourage or increase landings in Japan. There is no agreement as to whether this should be accomplished by requiring the landing in Japanese ports of pelagic tuna vessels or by increasing the number of 39-ton tuna vessels fishing in-shore waters. (Suisan Keizai Shimbun, August 24, 1962.)

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VIEWS ON NORTH PACIFIC HALIBUT RESEARCH:

Editor's Note: The following article on halibut research appeared in the Japanese fisheries periodical Suisan Keizai Shimbun, published in Tokyo, as part of a series of articles on Tripartite Fisheries Treaty problems.

It is widely known that the halibut resource and halibut fishery off the North American Continent (from northern California to the Bering Sea) have been successfully regulated internationally on the basis of research conducted by scientists and that, at the same time the Japan-United States-Canada Fisheries Treaty was concluded, Burkenroad's<sup>1/</sup> critical views on the fluctuation of the Pacific halibut had already been published, but apparently, there was no objection to placing halibut on the abstention list.

In 1956, the United States and Canada, in accordance with the provisions of the Treaty, submitted reports to the International North Pacific Fisheries Commission, in which they stated that their halibut stocks continued to qualify for abstention. These reports were submitted together with the reports of the International Pacific Halibut Commission and a few other publications. The arguments presented by the United States and Canada and subsequent discussions on their views which developed are summarized as follows:

The United States report began by stating that the existing designation of regulatory

<sup>1/</sup>Burkenroad, M. D., 1948, "Fluctuations in Abundance of Pacific Halibut," Bingham Oceanographic Collection Bulletin, vol. 11, pp. 81-129, New Haven, Conn.

## Japan (Contd.):

areas was proper, based on such studies as tagging experiments, and it then proceeded to support this assertion by presenting an analysis of historical developments on the basis of statistical data on catch and catch effort, with respect to halibut stocks in Area 2 and Area 3. The report contains the following summarization:

"Increased fishing intensity since 1910 did not provide an increase in sustained productivity of halibut. Evidence of this fact had already been obtained prior to the institution in 1930 of the first international regulation on fishing intensity. Subsequent studies resulted in similar findings."

To present this matter a little more in detail, the United States claimed that, prior to 1930, an increase in catch effort was accompanied by a temporary increase in yield, but significantly, subsequent to 1930, the fishery was characterized by a progressive decline in catches to levels below earlier catches. Since the Thompson-Bell model closely coincided with these changes, the mechanism hypothesized in the model did actually work. In other words, the United States maintained that this distinctive phenomenon was created by a change in catch effort, and that the current success, which had been expected from the law of population dynamics, was achieved not by increasing catch effort but by reducing effort after 1930.

Against these assertions, Japan pointed out that: (1) the Thompson-Bell model is based on factors other than catch effort, such as increment, growth, natural mortality rate and gear efficiency, which should be considered as variables; thus, theoretically, these factors provide no proof that the mechanism functions; (2) in applying the theories contained in the United States report, the results to date do not support the American assertions that, as the halibut resource has recovered and increased, the amount of annually exploitable increment has increased.

With regard to factors other than effort, Japan pointed out that the study of stock fluctuations has shown that natural changes, particularly changes in increment, have contributed to past developments to a greater extent than catch effort. Thus, Japan maintained that the United States did not present sufficient evidence that her halibut stocks fulfilled the abstention requirements.

In 1959, the United States and Canada submitted reports containing statistical compilations on sustainable catch based on increment. In calculating these figures, the United States and Canada first of all attempted to estimate the natural mortality rate, growth rate, and fishing mortality rate on the basis of existing data. They then used these estimated values to conduct a series of calculations to arrive at the sustainable catch quantity based on increment. Based on these results, they claimed that their present halibut stocks have approached the level of maximum sustainable productivity.

The theory of sustained yield based on increment is based on the premise that the annual increment can be determined without regard to abundance (strictly speaking, the quantity of parent fish), and that the year-class group of the increment provides a preliminary standard on the catch rate that would yield maximum catch. Calculations based on this standard show a particularly high catch rate for Area 3, but the present catch rates in all fishing areas are too low. The United States and Canada claim that the differences in catch rates are negligible and maintain that their halibut stocks fulfill the requirements for abstention.

However, the biggest question is that this theory and the resultant calculations cannot by themselves explain the historical developments, which are complex phenomena, that have occurred since 1930. If the annual increment is determined to be entirely unrelated to abundance and is considered to be a problem related to catch rates only, then the problem of regulating the halibut fishery is an economic problem, which can be solved by permitting either a fewer number of efficient fishing vessels or a larger number of less efficient vessels to engage in this fishery. (Suisan Keizai Shimbun, August 30, 1962.)

Calculations made by the United States and Canada suggest a significant increase in increment since 1930, and their figures primarily reflect the annual increase in stock that can be utilized. Their (original) theory of halibut fishery management was to increase abundance so as to raise to a maximum the yearly increase in the stocks that can be utilized.

It is true that their halibut stocks have increased in abundance, but the United States and Canada have not explained as to what

## Japan (Contd.):

level their resources will be considered to have reached a maximum, nor have they presented any evidence to support their claims that their stocks have now reached that level of abundance.

Reports so far submitted by the United States and Canada on the relationship between abundance and increment have merely stated the basic presumption that "increment reaches a maximum when abundance is at a certain level," and they have not yet presented any evidence to prove their assertions. Concerning this matter, the United States and Canada are said to be preparing new reports but, judging from the data that have been submitted, it may be difficult for those countries to provide any supporting evidence that will be acceptable.

The reason for this is that long-term fluctuations in the resource must be analyzed from a biological standpoint but, regrettably, contrary to expectations, biological data are somewhat meager. Most of the knowledge currently available concerning the ecology of halibut were obtained through investigations conducted before 1930. The inadequacies of the biological analyses performed on the data, which are based on the arbitrarily adopted and arbitrarily applied Thompson-Bell model, are glaringly apparent. In other words, the unbalanced selection of fishing grounds and the changes (fluctuations) accompanying these selections have created an ever increasing complex phenomena.

The reports submitted by the United States and Canada treat the Bering Sea halibut very briefly as a stock found in the fringes of Area 3. This was arrived at on the basis of early tagging experiments and, above all, on the basis of the smallness of the commercial halibut fishery in the Bering Sea.

In 1958, the United States and Canada submitted reports based on investigations conducted until 1956, and in those reports they insisted that the Bering Sea halibut were part of the halibut stocks in Area 3 and, at the same time, pointed out the necessity of conducting further studies on the Bering Sea halibut.

In 1959, the United States and Canada submitted papers on "Sustainable Catch Based on Increment," in which they mentioned that

the Bering Sea halibut (1956), as a virtually unutilized stock, were being used for the purpose of estimating the natural mortality rate of halibut.

At the annual meetings held in 1960 and 1961, Japan sought an explanation of the discrepancies and questionable points noted in the various reports presented earlier by the United States and Canada. For example, the expression "Bering Sea halibut" is used frequently in the report submitted by the United States and Canada, as well as those submitted by the Halibut Commission, but in many cases the statements were too brief to clarify the actual state of this stock. Moreover, the regulatory areas, Area 4, Area 3A and Area 3B, have been reorganized and this has served to further complicate matters.

However, the following two findings are important biologically. One is that a comparison of the average body weight by age group of halibut taken in the fishing grounds extending from Cape Spencer to the Bering Sea showed marked differences in values within the wide age group of halibut taken in the Bering Sea from those taken in the waters east of the Shumagin Islands in Area 3. The other is that the average body size by age group of halibut taken in the fishing grounds within Area 3 east of the Shumagin Islands showed practically no differences in value.

Halibut are known to migrate extensively as they mature. If they are to be identified as a single stock due to their migration and intermingling, then there should be a more uniform average body weight by age group.

Tag recoveries show that the fishing effort in the Bering Sea west of the Trinity Islands in Area 3 was indeed low. In view of this situation, it may be necessary to make a more thorough adjustment in determining the dividing line between the stock in the eastern part of Area 3 and the stock in the western extremity of that area. There is no denying the fact that this matter is not as simple as the United States and Canada claim it to be.

The present voluntary abstention conditions seem to have been established on the basis of experiences gained from the regulation of the halibut fishery. Superficial observations of the changes that have occurred in catch quantities and catch effort during the 50 years since 1910 seem to indicate that the halibut fishery literally satisfies the abstention conditions stipulated in the Tripartite Fisheries



## Japan (Contd.):

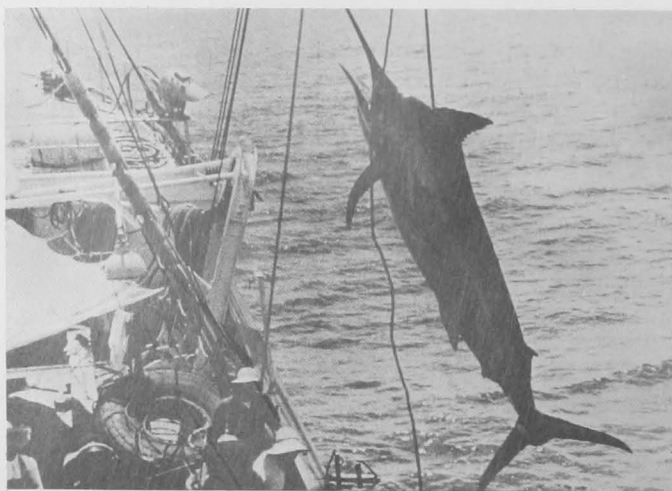
Treaty. However, the study and analysis of historical developments from the biological standpoint reveal the existence of problems (assumptions) which have not been substantiated and which, at the present time, may be practically impossible to prove.

The abstention conditions, which seek to establish a sustainable yield, involve the problem of regulating fishing intensity and the problem of determining the necessity of regulating effort. However, these two problems concern matters related to resources, abundance, and economics. From a commercial standpoint, the greater the abundance, the less effort will be required to produce the necessary catch. In this sense, the regulation of the halibut fishery has actually produced the desired results. However, there is no clear scientific evidence to support the assertions that this regulation will ultimately increase abundance or that it will show such prospects. (Suisan Keizai Shimbun, August 31, 1962.)

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#### FROZEN SWORDFISH EXPORTS TO UNITED STATES:

Frozen swordfish exported to the United States from April 1, 1962 (beginning date of Japanese fiscal year) to October 1, 1962, totaled 3,036 short tons. This is according to data compiled by the Japan Frozen Foods Exporters Association. Exports during the same period the previous year were 2,750 short tons.



Hauling in a swordfish aboard a Japanese catcher vessel.

Sales of swordfish in the United States were reported good during 1962. Wholesalers' inventories at New York City and Boston as of September 6, 1962, were reported slightly lower than at the same time a year earlier. (Shin Suisan Shimbun Sokuho, October 3, 1962.)

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#### FROZEN OCTOPUS EXPORTS TO U. S. AND CANADA:

Japanese exports of frozen octopus to the United States and Canada have been favorable this season. Nearly 1,700 short tons were shipped during the season (February-July), almost twice as much as last season. Also, the price has been about 23 cents a pound c.&f., an increase of 20 percent from last season.

Frozen octopus is used as bait for halibut fishing in Canada and Alaska. (Suisan Tsushin, August 6, 1962.)

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#### FISH MEAL FACTORYSHIP TO OPERATE OFF ANGOLA:

The Japanese fish meal factoryship Renshin Maru (14,094 gross tons) was expected to return to Japan from the eastern Bering Sea bottom fishing grounds on or about October 10, 1962. Upon its return, the factoryship was to be refitted and dispatched around November 1 to Angolan waters, where it will process fish (delivered by Angolan fishing vessels) into fish meal on a contract basis, like it did in 1961. (Suisan Tsushin, Japanese periodical, September 22, 1962.)

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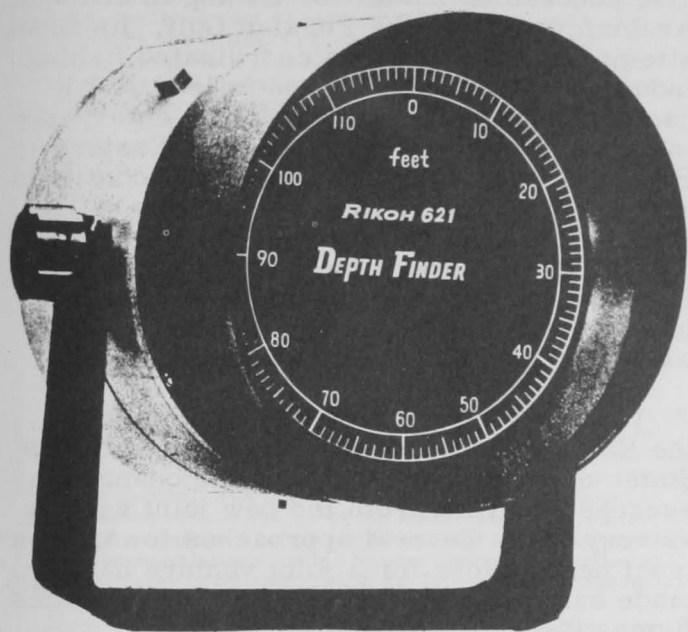
#### TRANSISTORIZED DEPTH-FINDER DEVELOPED BY JAPANESE FIRM:

Six flashlight dry batteries or a storage battery will operate a new Japanese transistorized depth-finder. The manufacturer claims the new depth-finder (with a total weight of only six pounds) will measure depths up to 120 feet with a margin of error of less than 2 percent. The manufacturer also states that the instrument may locate schools of fish. It is priced at 28,000 yen (US\$77.77) f.o.b. Japan.

The transistorized depth-finder consists of an indicator 6 inches in diameter and  $7\frac{1}{2}$  inches long, plus a separate transducer  $1\frac{1}{4}$  inches in diameter and  $4\frac{3}{4}$  inches long. Sound-

## Japan (Contd.):

ings are taken at the rate of 1,200 per minute. Neon flashes on the dial of the indicator show the depth of water. Intermittent neon flashes on the dial show a school of fish.



The transducer is designed to be attached to the bottom of a boat. But it may be attached to the side of a boat by the use of a vinyl tube and C-clamp. The C-clamp for use with the depth-finder is an extra cost item that will be supplied by the manufacturer upon request. The transducer should be submerged at least 10 inches in the water and placed so that it will be vertical to the sea surface when the boat is running. (Fisheries Attache, United States Embassy, Tokyo, September 19, 1962.)

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STERN TRAWLER LAUNCHED:

The large stern trawler Taiyo Maru No. 73 (1,500 gross tons), ordered by a large Japanese fishing company, was launched in Shimonoseki, Japan, in September 1962. The vessel is equipped with the most modern electronic equipment, such as fish-finder, radar, and loran. Delivery was expected to be made around the end of November 1962.

Specifications of the vessel are: Length, 227.7 feet; beam, 38.9 feet; draft, 18.8 feet; power plant, 2,000 hp. Diesel engine; speed, 14 knots. (Minato Shimbun, September 29, 1962.)

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CONSIDERS RUSSIAN TRAWL FISHING METHODS IN GULF OF ALASKA OUTDATED:

The Japanese Fisheries Agency and the Japanese fishing industry reportedly consider the trawl fishing methods employed by the Soviet Union in the Gulf of Alaska as being very crude and far inferior to the methods presently employed by the Japanese trawl fleet.

Information concerning the Russian trawl gear was supplied to the Japanese Fisheries Agency by the U. S. Department of State following the interim meeting of the International North Pacific Fisheries Commission held at Honolulu in August 1962. At this meeting, the United States delegation made reference to the Soviet trawl gear, which was reported to be constructed and operated in such a way that it did not take halibut. Japan requested that she be provided with data concerning the Russian trawl.

The data supplied by the United States indicated that the Russians used 40-pound sinkers attached to 12 drop lines, which are fixed to the bottom entrance of the trawl. The 12 sinkers serve to keep the trawl near the bottom but at predetermined heights off the bottom, depending on the length of the drop lines. Reportedly, the Japanese consider the use of sinkers to hold down a trawl near the bottom an outdated technique. (Shin Suisan Shimbun Sokuho, September 21, 1962.)

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MORE JAPANESE VIEWS ON SECOND UNITED STATES-JAPAN TUNA MEETING:

The second Japan-United States tuna meeting convened in Tokyo on October 9, 1962. The editorial column of the Japanese fisheries periodical Suisan Keizai Shimbun, of October 11, 1962, in part, had this to say about the meeting:

The Japanese tuna industry awaits the outcome of the second tuna meeting with great expectations. The Japanese delegates have generally agreed to develop the following four points during the meeting: First, Japan will actively cooperate in international investigations of tuna resources in the Indian and North Pacific Oceans. Second, Japan will seek participation in the Inter-American Tropical Tuna Commission since she naturally should take part in the yellowfin tuna regulatory program in the eastern Pacific Ocean. Third, Japan will seek clarification of the canned tuna market situation in the United States, where a supply shortage estimated at 150,000 cases reportedly exists despite restrictions applied on canned tuna imports by the United States by means of tariff quota. Fourth, Japan will observe the attitude of the United States and will strive to bring about a better understanding among the Americans of Japan's desires and intention.

Japan and the United States must understand each other's position with respect to tuna trade, says the periodical. Unnecessary trade restrictions can be removed and Japan can supply the deficiency. It is hoped that the development of Japan's fishing industry and tuna export trade will result in further promoting friendly trade relations between Japan and the United States.

## Japan (Contd.):

Japan, which is now virtually the world's leading supplier of tuna, must participate in the joint investigation of resources with dignity, confidence, and firmness of purpose.

The Japanese periodical Suisan Tsushin of October 13 and 15, 1962, reported in part:

The tuna conference was primarily an exchange of views by both countries on known problems related to tuna fisheries, with no particularly new topic being introduced for discussion. During the subcommittee meetings held on October 10 and 11, fairly pointed views were exchanged between the delegations of both countries in regard to investigation of resources and trade problems. Reportedly, Japan presented more data on resources than did the United States, but the United States delegation is reported to have stated that "Various countries are conducting investigations of resources in the Atlantic Ocean, so Japan should also cooperate in those investigations rather than just take fish. Catch data alone cannot be considered investigations." Japan stated that she would hereafter prepare catch data covering smaller areas. Regarding trade problems, the United States delegation stated that Japan has considerably expanded her trade, due to the rapid increase in tuna catches taken by her fishermen. In reply, the Japanese remarked, "United States packers have established canneries in South America with American capital for production of tuna packed in brine, and they are importing the South American production into the United States under the tariff quota which permits imports of tuna packed in brine up to an amount corresponding to 20 percent of total United States canned tuna production for the previous year. Imports of tuna packed by United States-managed plants should be excluded from this tariff quota."

Both Japan and the United States agreed that this meeting was beneficial to the two countries. Summarized below are the subcommittee meetings held on October 10 and 11.

1. The meeting of Subcommittee I focused attention on the problem of conserving the tuna resources. Reports on investigations of resources conducted by both Japan and the United States were presented by the delegates of the two countries. The United States delegation presented various data on which the United States based her yellowfin tuna catch regulation to be enforced in the eastern Pacific Ocean. In connection with the yellowfin tuna regulatory problem, the Japanese delegation reported that the tuna vessels of Japan were instructed to submit catch data to the Government and that, Japan, although she is still studying measures to be applied after the yellowfin catch quota is filled, intends to render all possible cooperation to the United States Government in regulating yellowfin tuna catches. The United States delegation expressed its desire of extending the present eastern Pacific Ocean tuna investigation program to the waters of the South Pacific Ocean, the Indian Ocean, and the Atlantic Ocean.

2. The meeting of Subcommittee II primarily dwelled on the theme of expanding the utilization of tuna products and of expanding the tuna trade. Concerning United States imports of canned tuna, the Japanese delegation reportedly presented the following inquiries: (a) Is it not unreasonable for the United States to exclude the Samoan production in the total United States canned tuna production, which forms the basis in computing the United States tariff quota on imports of canned tuna in brine? (b) Why does the United States impose such a prohibitive tariff of 35 percent on her imports of tuna packed in oil?

To these questions, the United States delegation is reported to have replied substantially as follows: (a) The U.S. Tariff Act specifically states that Samoa, Wake Island, Midway Island, and three other United States territories are not considered a part of the United States mainland; (b) at the price which Japan exports canned tuna in oil to European countries, she should be able to sell tuna packed in oil to the United States even if a 35-percent tariff is imposed. (Suisan Tsushin, October 13 and 15, 1962.)



## Kuwait

### SHRIMP PRODUCING POTENTIAL SURVEYED BY UNITED STATES FIRM:

The Saudi Fishing Company, Ltd., in January 1962, observed its tenth year as exclusive concession holder for fishing in all Saudi Arabian waters of the Persian Gulf. Its first attempt at establishing a coordinated fishing industry in the Red Sea area failed. But it has granted a subconcession to an enterprising frozen foods distributor in the Eastern Province who negotiated and signed contracts with a United States firm for surveys of the Persian (Arabian) Gulf. Two trawlers owned by the United States firm were en route from Pakistan the latter part of this past summer to conduct a shrimp survey in Persian Gulf waters off the Eastern Province of Kuwait.

The frozen foods facility at Dammam in the Eastern Province is managed by a United States national who estimated the chances for success resulting from the new joint venture as very high. Several approaches toward contract negotiations for a joint venture had been made earlier this year by other United States firms.

The frozen foods distributor at Dammam has already installed a small pilot shrimp freezing plant which is to be used in the survey. The plant will be expanded if shrimp are found in quantity. No financial details of the subconcession were given, but the terms were believed to be attractive to the concessionaire.

Shrimp fishing has been successful in Kuwait. For this reason, the joint venture is regarded as a logical alliance between an experienced United States firm and an established Saudi freezer plant operator. (United States Embassy, Kuwait, September 1, 1962.)



## Mexico

### WEST COAST 1962/63 SHRIMP FISHING SEASON DELAYED BY VESSEL TIE-UP:

The new shrimp fishing season on Mexico's west coast did not start on September 15, 1962, as originally scheduled, due to a vessel tie-up over contract negotiations. Fishing vessels were all set to start on that date, but at the last minute, boat owners and the cooperatives (who have exclusive rights to the catching of shrimp in Mexico) failed to agree on a new contract. This resulted in some 200 vessels being tied up. The loss to the shrimp industry because of the tie-up was estimated at 6 million pesos (US\$480,000) a day, and affected Mexico's Pacific Coast shrimp fishery from Salina Cruz to Puerto Penasco.

## Mexico (Contd.):

As of September 26, 1962, the major dispute between the boat owners and the cooperative fishermen appeared to be on the 45 percent share demanded by the cooperatives. Although Mexican west coast shrimp vessels were then fishing, the tentative agreement reached on September 22 was not final, and it was feared that fishing again would stop. The cooperatives want 45 percent of the entire catch; the boat owners are willing to give only 45 percent of the net sales return above a cost figure of about \$1,400 a metric ton for Guaymas, and about \$1,440 for Mazatlan. For example, if a metric ton of shrimp from Guaymas netted \$1,700 on the United States market, the cooperative would get \$135, or 45 percent of the difference between \$1,700 and \$1,400.

In addition, it was reported that the boat owners were willing to pay the fishermen a flat \$360 a metric ton for heads-off shrimp, and to pay all boat operation costs including food. But agreement on that point had not been reached. Reports were that the fishermen wanted a premium price when shrimp landings exceeded a specific quantity.

The last contract agreed on by the cooperatives and boat owners expired August 31, 1962, and the dispute which was still in force later in September was the result of contract negotiations between the boat owners who are represented by the National Chamber of the Fishery Industries, and the cooperatives which are represented by themselves and the Mexican Government. The negotiations began with the cooperatives wanting to take charge of the marketing of the entire catch and paying the boat owner 10 percent of the net profits. Later, the negotiations settled around the points mentioned above, and that developed toward the latter part of September.

When negotiations on a new contract for the coming season began in August, it was expected that the price to the cooperatives would be increased based on higher living costs. But before an agreement was reached, word was received from the Confederacion Nacional de Cooperativas de la Republica Mexicana (National Federation of Cooperatives), that the new contract should provide that the boat owners must fully outfit the vessel as was done the previous year. The cooperatives were assigned certain expenses which the boat owners stipulated should not exceed 25 percent, with the balance of the expenses to be borne by the boat owners. The gross catch was to be equally divided between boat owners and cooperatives.

The shrimp fishing fleet, consisting of some 200 vessels, was being provisioned and getting ready to sail on September 15. Ship suppliers had accumulated large quantities of perishable foods such as meat, eggs, and vegetables, which they planned to load aboard the refrigerated vessels before their departure. Those suppliers had no cold-storage facilities and their loss because of the delayed sailing date was considerable. Expecting that the order to sail might come at any day, additional ice was placed in the boats so that they could leave on short notice with a full supply.

Shrimp fishing in Mexico has been reserved for the cooperative fishermen since the middle of 1940, and until recent years the majority of the shrimp vessels were privately owned, but operated by cooperative fishermen on a contractual basis approved by the Government.

The shrimp industry, including fishing, freezing, and exporting shrimp, is the most important factor in Mazatlan's economy. The 1961/62 shrimp fishing season was unusual in that landings were heavier than they normally are, and prices on the United States market were higher than usual. July through September 15, 1962, was the closed season for Mexico's west coast shrimp fishery. During the closed season to shrimp fishing, freezing plants are cleaned, machines and equipment are overhauled, and the boats are put into shape for the new fishing season. After that two-months period of idleness, it was anticipated that the vessels would sail about mid-September as usual, and possibly repeat the good shrimp landings of the previous season.

As far as Mexico's fishing operations in international waters are concerned, it has been pointed out by observers that those waters provide 70 percent of the shrimp landed at Mazatlan. Their thinking is that if the vessel tie-up were to continue, United States shrimp vessels could well come into that area and take full advantage of the existing deadlock in Mexico's west coast shrimp fishery.

The Mexican cooperatives have had a virtual monopoly on Mexico's shrimp fishing industry since the late 1930's when it was decreed by the Government that the cooperatives only could fish for shrimp in national waters. The cooperatives, which almost without exception own no fishing vessels, operate them with the boat owners who are known as "armadores." A two-year contract, signed in August 1960, stated that the boat owners were to provide boats fully equipped with tackle, ice, provisions, and with vessel engines that were satisfactory to the vessel's engineer. The crews went aboard with only their personal effects. The boat owners paid the captains an average of 50 pesos (US\$4.00) a day, the engineers 40 to 50 pesos a day, and also paid the cooks whose pay varied widely. In addition to wages, the 3 crew members would receive a bonus if the boat returned to port with more than 3 tons of shrimp. The bonus varied with the size of the catch. The rest of the crew were paid by the cooperatives.

The boat owners paid the cooperatives 3,040 pesos (\$243) a ton for the catch which was delivered to the freezing plants for processing and packing on a fee basis. During the 1961/62 fishing season, the cost of the processing and packing operation was about 1,750 pesos (\$140) a ton which included the cost of the waxed cardboard container. The boat owner received an estimated average price of 20,000 pesos (\$1,600) a ton for his shrimp.

The "armadores" or boat owners have an estimated investment of 400,000 pesos (\$32,000) in each vessel. New vessels are now estimated to cost 560,000 pesos (\$44,800) each. The size of the boat owner's investment, plus operating and maintenance costs, precluded their acceptance of the contract terms offered in August 1962 by the cooperatives. According to law, the boat owners are not to fish for shrimp in Mexican waters. They could possibly go out beyond the Mexican territorial fishing limits and fish there, but such a move could result in some sort of duty or penalty charge which would make the landing of shrimp an economic impossibility. It was suggested that such vessels might fish in international waters and take their catch to other countries, such as Guatemala, for processing. It was doubted that such action would be taken by any of the vessels as a solution to the problem. Boat owners might be agreeable to selling their vessels to the cooperatives, but these do not have the money to buy them.

Mexico exported slightly more than 79 million pounds of shrimp to the United States in 1961. Mazatlan's shrimp industry exported about 22 million pounds of shrimp that year at prices of from 75 to 80 cents a pound, representing earnings of about \$17 million.

Contracts for the building of 11 new fishing vessels in Mazatlan were cancelled in September. (United States Consulate, Mazatlan, dispatch, September 21, 1962; United States Embassy, Mexico City, dispatch dated September 27, 1962.)



## Portugal

### CANNED FISH EXPORTS, JANUARY-JUNE 1962:

Portugal's total exports of canned fish during the first half of 1962 were 3.8 percent greater than in the same period of 1961. Sar-

Portugal (Contd.):

dines accounted for 82.3 percent of the 1962 exports of canned fish, followed by anchovy fillets with 9.2 percent.

Portugal's principal canned fish buyers in the first half of 1962 were Germany with 6,251 metric tons, followed by the United Kingdom with 4,506 tons, the United States with 3,718 tons, Italy with 2,896 tons, and France with 2,283 tons.

Portuguese Canned Fish Exports, January-June 1961-1962				
Product	January-June			
	1962		1961	
	Metric Tons	1,000 Cases	Metric Tons	1,000 Cases
<b>In Oil or Sauce:</b>				
Sardines . . . . .	25,102	1,321	24,212	1,274
Chinchards . . . . .	719	37	791	41
Mackerel . . . . .	614	24	278	11
Tuna and tuna-like . . . . .	1,125	37	1,258	45
Anchovy fillets . . . . .	2,813	281	2,699	270
Others . . . . .	131	7	140	7
<b>Total . . . . .</b>	<b>30,504</b>	<b>1,707</b>	<b>29,378</b>	<b>1,648</b>

In June 1962, Portugal's canned fish exports to the United States consisted of 237 tons of sardines, 238 tons of tuna, 93 tons of anchovy fillets, and 3 tons of other species. (Conservas de Peixe, August 1962.)

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**CANNED FISH PACK, JANUARY-JUNE 1962:**

Portugal's total pack of canned fish in oil or sauce for the first half of 1962 was 4.7 percent greater than in the same period of 1961. The sardine pack accounted for 63.7 percent of the total pack, followed by anchovy fillets with 18.3 percent of the total. There were increases in 1962 in the pack of sardines (up 15.4 percent), chinchards, and anchovy fillets. But the pack of tuna dropped 44.1 percent and the pack of mackerel also declined.

Portuguese Canned Fish Pack, January-June 1961-1962				
Product	January-June			
	1962		1961	
	Metric Tons	1,000 Cases	Metric Tons	1,000 Cases
<b>In Oil or Sauce:</b>				
Sardines . . . . .	10,746	565	9,314	490
Chinchards . . . . .	1,289	68	641	34
Mackerel . . . . .	188	7	533	21
Tuna and tuna-like . . . . .	1,466	49	2,621	94
Anchovy fillets . . . . .	3,081	368	2,842	285
Others . . . . .	108	5	164	9
<b>Total . . . . .</b>	<b>16,878</b>	<b>1,002</b>	<b>16,115</b>	<b>933</b>

During the first half of 1962 sardine landings amounted to 23,801 metric tons, up 14.2

percent from sardine landings of 20,847 tons in the same period of 1961. (Conservas de Peixe, August 1962.)

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**MODERN FISHING BASE PLANNED:**

A fishing base with modern equipment for handling tuna and other fish is planned for Sao Vicente in the Cape Verde Islands by Portuguese and German interests. The base will have freezing and preserving machinery, equipment for processing fish meal and oil, a saline water conversion unit, modern laboratory, and a community recreation center.

The cost of building the fishing base in the Cape Verde Islands in the Atlantic Ocean several hundred miles west of Dakar (West Africa) and the cost of acquiring several modern tuna vessels will amount to \$8,750,000. The major part of the financing will be provided by German interests on a deferred credit basis and most of the equipment will be of German origin. It is believed that Portuguese interests will assume responsibility at the base for the actual construction and fishing operations. (United States Embassy, Lisbon, September 14, 1962.)

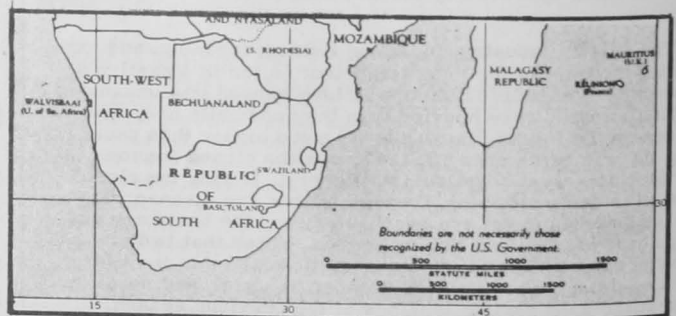


**South Africa Republic**

**PLANS TO EXTEND TERRITORIAL FISHING LIMITS TO 12 MILES:**

The Government of the South Africa Republic intended to ask the South African Parliament at its last session to extend the territorial fishing limits to 12 miles. But according to a member of the Parliament, there had not been sufficient time to introduce such legislation and it is the Government's intention to do so at the next session.

The Senator making the announcement said that South Africa would be forced to take



**South Africa Republic (Contd.):**

this action since many other nations had already declared such territorial fishing limits. He added that, in fact, two-thirds of the countries bordering on the sea already had a 12-mile fishing limit. He further contended that several other countries, including the Soviet Union, were showing great interest in the fishery resources off South and South-West Africa, and that it was the Government's duty to protect the country's interests.

It was generally felt that the presence of Soviet fishing vessels operating close to the South-West African coast generated the demand for the extension of territorial fishing limits. (United States Consulate, Cape Town, August 10, 1962.)



**Switzerland**

**JAPANESE CANNED TUNA PRICES, MID-SEPTEMBER 1962:**

In mid-September 1962, the prices paid by Swiss importers for Japanese solid pack canned tuna in oil were:

<b>F.O.B. Japan: White Meat</b>	
(48 7-oz. cans): Fancy A . . . . .	\$ 9.70 a case
Fancy B . . . . .	\$ 9.45 a case
<b>C. &amp; F. European Ports:</b>	
White Meat: (48 7-oz. cans) . . . . .	\$10.25 a case
(48 3½-oz. cans) . . . . .	\$ 5.78 a case
(24 13-oz. cans) . . . . .	\$10.00 a case
( 6 6½-oz. cans) . . . . .	\$11.40 a case
Light Meat: (48 7-oz. cans) . . . . .	\$ 7.19 a case
(48 3½-oz. cans) . . . . .	\$ 4.17 a case
(24 13-oz. cans) . . . . .	\$ 7.26 a case
( 6 6½-oz. cans) . . . . .	\$ 8.25 a case

(United States Embassy, Bern, September 18, 1962.)



**Saudi Arabia**

**AUTHORIZES IMPORT OF JAPANESE CANNED SAURY:**

The Egyptian Government has reportedly issued a new import license to an Egyptian company, authorizing that company to import Japanese products during October 1962 to March 1963, according to information received by Japanese exporters. The company is reported to be planning on importing around US\$600,000 worth of canned saury and other canned fish products from Japan, and is expected to open negotiations with Japa-

nese firms shortly. (Suisan Tsushin, October 3, 1962.)



**United Kingdom**

**FISHERY LOANS INTEREST RATES REVISED:**

The British White Fish Authority announced that, as a result of a change in the rates of interest charged to them by the Treasury, their own rates of interest on loans made as from August 18 will be as follows:

Fishing vessels of not more than 140 feet, new engines, nets and gear: on loans for not more than 5 years, 5¼ percent, decrease ⅛ percent; on loans for more than 5 years, but not more than 10 years, 5¾ percent, decrease ⅛ percent; on loans for more than 10 years, but not more than 15 years, 6¼ percent, decrease ⅛ percent; on loans for more than 15 years, but not more than 20 years, 6½ percent, decrease ⅛ percent.

Processing plants: on loans for not more than 20 years, 7¾ percent, decrease ⅛ percent.

The rates on loans made before August 18 are unchanged.

Note: See Commercial Fisheries Review, September 1962 p. 109.



**Venezuela**

**JAPANESE FISHING FIRM NOT ABLE TO ROTATE TUNA TECHNICIANS IN VENEZUELA:**

The Chiba Prefectural Fisheries Promotion Company, a Japanese firm which jointly established a fishing company in Venezuela three years ago with a Venezuelan firm, is reportedly encountering difficulty in rotating its technical personnel stationed in Venezuela.

In 1959 and 1960, the Japanese company dispatched a total of 52 Japanese technicians to Venezuela to operate tuna vessels for the joint enterprise and to provide technical assistance. Of those 52 technicians, 16 who had fulfilled their three-year contracts returned to Japan in August 1962 and the Japanese company was planning to send 10 replacements to Venezuela. However, a hitch de-

## Venezuela (Contd.):

veloped in this plan due to the Venezuelan Government's failure to approve the entry of the replacements. Reportedly, the Venezuelan Government's action to withhold approval was based on the law of that country which limits admission of non-Caucasian nationals into Venezuela. The Japanese company does not think that Venezuela intends to prohibit entry of Japanese nationals and is expecting

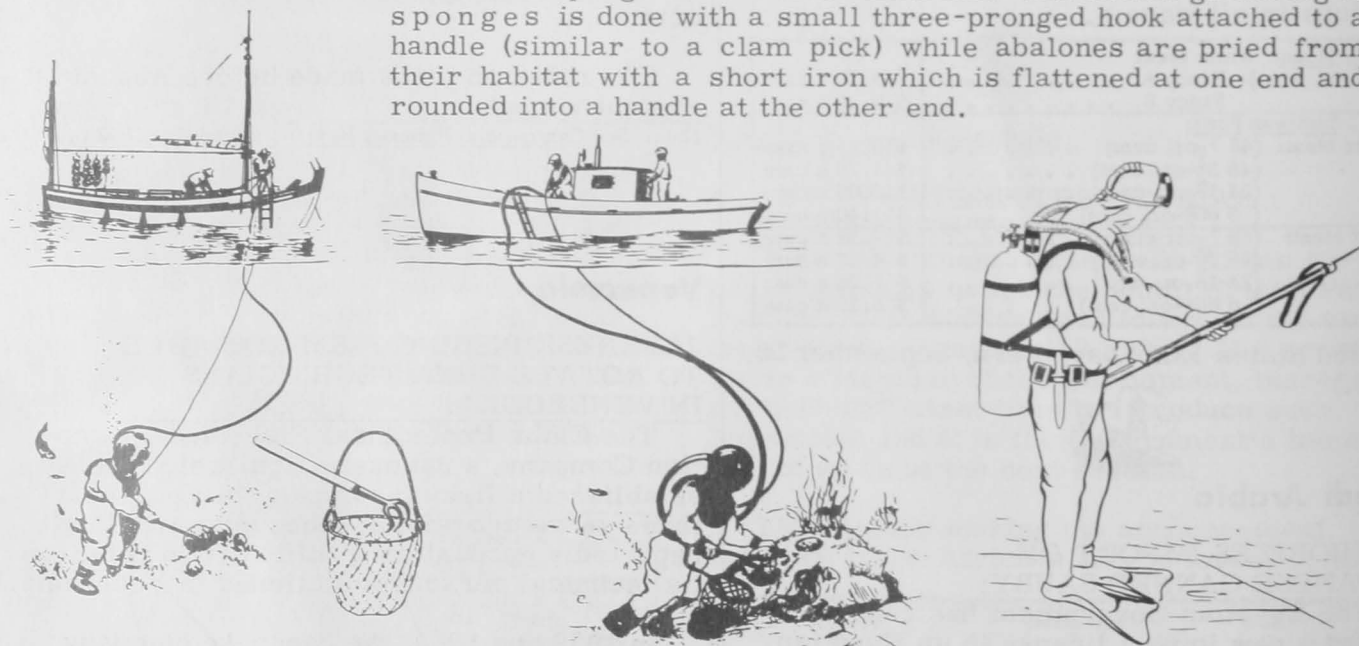
a formal announcement to be made on this matter by the Venezuelan Government.

The joint Japanese-Venezuelan fishing company was established with a capital investment of 100 million yen (US\$278,000) and three vessels (two 90-ton and one 300-ton vessels) invested by the Japanese company. This joint company now has a fleet of seven tuna vessels operating in the Caribbean Sea, which in 1961 landed a total of 770 metric tons of fish. (Suisan Keizai Shimbun, September 25, 1962.



## DIVING OUTFITS

A diving outfit may consist of a face mask supplied with air from a tank carried on the back of the diver, or a regular diving suit which encases the diver and is supplied air by a pump on the deck of a vessel. The first method, commonly called a skin diving outfit, is used in capturing fish or shellfish with a spear or bow gun. The regular diving outfit is used in the sponge and abalone fisheries. The actual gathering of sponges is done with a small three-pronged hook attached to a handle (similar to a clam pick) while abalones are pried from their habitat with a short iron which is flattened at one end and rounded into a handle at the other end.



Note: Excerpt from Circular 109, Commercial Fishing Gear of the United States, for sale from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., single copy, 40 cents.