



International

NORTH PACIFIC FISHERIES COMMISSION

COMMISSION MEETING IN JAPAN REVIEWS INTERNATIONAL SALMON RESEARCH:

Biological evidence upon which management of salmon resources of two continents may eventually be based was reviewed by the International North Pacific Fisheries Commission at a meeting in Tokyo, Japan. The sessions began with technical meetings on October 23, 1961, and continued through November 11.

Japan, which harvests salmon on the high seas, and the United States and Canada, which harvest the salmon as they head for the spawning streams, are signatories of the treaty creating the Commission. This treaty became effective in 1953. It provides for comprehensive biological studies of the North Pacific Ocean, particularly the distribution of salmon through that area.

Two stocks of salmon intermingle on the high seas: those which spawn in North American streams and those which spawn in Asian streams. Since the species are the same, a major task for the Commission, and one which called for several years of biological research, was the development of means by which the North American salmon could be differentiated from those of Asian origin. This differentiation is accomplished by serological methods, body measurements, scale inspection, and other means. Distribution studies are being made by exploratory fishing for salmon at 60-mile intervals along a grid covering vast areas of the North Pacific Ocean and Bering Sea. More intensive explorations are made when conditions warrant. The U.S. Bureau of Commercial Fisheries was responsible for the major portion of the biological investigations.

As in previous meetings, reviews of the latest presentations of "evidence for abstention" were high on the agenda of the Tokyo meeting. Under the present treaty, Japan abstains from fishing for salmon east of 175 degrees west longitude, leaving the salmon resources east of that line to Canada and the United States. This principle of "abstention" is relatively new in international law and its application is considered valid only when a fishery resource is being managed in such a way that the annual harvest is the maximum amount consistent with continuing the resource.

The Commission and the fishery scientists are interested in any study related to any intermingling of North American and Asian salmon and the relationship of any such intermingling to the abstention line. American and Canadian scientists are particularly concerned whether the harvesting of fish in the area of intermingling has an appreciable adverse effect on the numbers of salmon reaching the North American fishing areas.

Because of the size of the ocean and the many facets of the investigative programs, there is no indication yet as to when the biological data will be sufficiently conclusive to be acceptable to all concerned.

Closing Comments by Chairman of United States Section:
At the final Plenary Session of the Commission on November 11, 1961, the Chairman of the United States Section made these closing remarks:

"... Our scientists have worked long and well. Their accomplishments have been outstanding. They have done a good job.

"We Commissioners have been faced at this meeting with several problems of critical importance to the North Pacific fisheries. Two of them have been with us for some time. One is new. All are admittedly difficult to solve. How have we dealt with them? Let us review the results of this meeting.

"The Secretary of the Interior of the United States, at our opening session, drew our attention to the problem of the critically small Bristol Bay red salmon run in 1962. The run is expected to be one of the smallest in recent years. United States scientists estimate it at about 9 million fish. If adequate escapement to the spawning grounds is to be obtained, severe restrictions will be necessary. The State of Alaska plans to impose the needed regulations on the United States fishery; and in some areas it is possible that complete closure will be necessary. Under the best of circumstances, the American catch will be small. But the success of the severe conservation regime to be imposed upon the inshore fishery and the likelihood of even a minimum economic American fishery will be jeopardized if the high-seas fishery follows a pattern similar to those of 1960 and 1961. Is it not reasonable to expect that the high-seas fishery be similarly restrained? Indeed, restrictions of the utmost severity on the high seas fishery are essential if a disastrous situation is to be avoided.

"What has the Commission done about this problem? It has reaffirmed the resolution on conservation which it adopted at an earlier meeting, and has added certain meaningful phrases to it, drawing attention to the problem. This last is encouraging. The new language suggests, at least, that the 1962 season will be a difficult one. But does this resolution, with the new language, really reflect the critical nature of the problem? We think not, Mr. Chairman. The United States Section has agreed to this general resolution because something is perhaps better than nothing; because we hope that the Governments will read in it what we have been unable to agree to say in it--that a severe conservation regime must be imposed on all fisheries harvesting this run. I wonder how this general resolution will be received by the people of Alaska and the Pacific Coast of the United States whose livelihoods are dependent upon the present and continued productivity of the Bristol Bay run.

"Mr. Udall also spoke of the tremendous growth of bottom fish operations in the Bering Sea and of the threat they would offer to the halibut resource of the eastern Pacific Ocean if they were to be extended into waters south of the Aleutian Islands. He urged us to take cognizance of the problem, to recognize the need for restraint, and to make appropriate recommendations to the Governments. What have we done? We have talked about the problem; exchanged views at length. Beyond this we have done little.

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"There is reason to fear that the Bering Sea bottom fish operations may expand to the south. Threats of this were heard, I may say, before we came to Tokyo. There is also good reason to believe--we have made some study of the matter, study which is continuing--that if trawlers operate in the waters south and east of the Aleutian Islands on the continental shelf they will catch halibut in substantial quantities, and that they will kill halibut in substantial quantities. The catches may be small in relation to the total catch of other less important species, but, Mr. Chairman, the total catch from Japanese trawling operations alone in the Bering Sea is reported to be in excess of one billion pounds. If the catch to the south is only a fraction of this, the incidental catch and destruction of halibut may be expected to be substantial. We doubt that this would be in accord with the spirit and intent of the Convention.

"As I said, the United States and Canada are conducting an extensive joint study of the distribution of halibut in relation to the distribution of other bottom fish in the waters south and east of the Aleutian Islands. At this meeting we have urged the Commission to recommend to the Governments that the expansion of bottom fish operations to this area be delayed until this study has progressed further; and until we are in a position to evaluate the effect of trawl operations upon the halibut resource. This is a minimum of action. This is only prudent. The Commission has not adopted such a recommendation. Indeed, the Commission can hardly be said to have recognized the critical nature of the problem. Is this responsible action on the part of a Commission charged with the conservation of North Pacific fishery resources?

"The Commission has made somewhat more progress in other fields. We in the United States have for some time been concerned over the fact that the Commission's scientists have not been able to make full use of the statistical and biological data being obtained in the Japanese salmon fleets. We have considered that these data would make a major contribution to the Commission's studies related to the Protocol. Some data have been made available in the past, but they have constituted only a small part of what is needed in that connection. We are gratified to learn that Japan will be able to supply more information in the future as a routine matter. We are disappointed to learn, however, that these data will be grouped in such large geographic units and in such long time periods as to reduce materially their usefulness. We believe that all members of the Commission have an obligation to furnish pertinent information in the most useful form practicable. We earnestly hope that Japan will find it possible to supply data in greater detail as time goes on.

"The record of this meeting--in the light of the critical problems requiring attention and resolution--is not one to be especially proud of, Mr. Chairman. At our opening session I expressed the confidence of the United States that the Commission's deliberations at this meeting would demonstrate it to be worthy of the trust reposed in it by our Governments and our peoples. I am frank to say that that confidence has been shaken--not destroyed, but certainly shaken.

"We hope, we believe that upon reflection all of us--and our Governments--will recognize the critical nature of these problems, and, in the months immediately ahead, give further thoughtful consideration to them. . . ."

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**INTERIOR SECRETARY UDALL
ADDRESSED NATIONAL
MEETING IN TOKYO:**

The Eighth Annual Meeting of the International North Pacific Fisheries Commission began in Tokyo, Japan, with

technical meetings on October 23 and continued through November 11, 1961. At the opening plenary session on November 6, U. S. Secretary of the Interior Stewart L. Udall addressed the meeting as follows:

"I want to thank Minister Kono for his warm words of welcome and the people of Japan for the most gracious hospitality extended to Mrs. Udall and me during our stay in your beautiful country. In our brief visit we have established friendships that will deepen with the passing of time, and we look forward to a renewal of the valuable contacts which have given us such new insight into the resource development opportunities and problems of the Japanese people.

"My prime responsibility as a Cabinet Officer of the United States Government lies in concern over the conservation and wise use of natural resources. The conservation philosophy of President Kennedy and his administration is an enlargement of the philosophy of a great American of this century who was also a great friend of the Japanese people--President Theodore Roosevelt.

"The very essence of the conservation thinking of these two Presidents is that the welfare of future generations should have a paramount place in resource planning. Indeed, I believe I can state flatly that all three of the Governments represented here today would reject out of hand any proposal that today's standard of living be enhanced at the expense of those who must look to our common resources for sustenance tomorrow.

"This is a conservation conference--and the treaty document that has brought us to this table represents a search for sound principles with which to manage important living resources of the sea. It is the hope of my Government that these deliberations will serve to advance the solution of the complex problems we confront.

"The rapid growth of world populations is creating a steadily increasing demand for food; and the expansion of fishing into all areas of the world, with rapid development of fishing technology, poses a special challenge to fishing nations to cooperate in renewing our world fishery resources. Therefore, it is vital that our fishery conservation commissions make a strenuous attempt to develop facts and scientific data which will enable us to build the foundations of a lasting program.

"Bearing in mind the complex problems which confront us in the North Pacific, my country takes considerable satisfaction in the progress we have made. While some of the terms of the Convention may need clarification to resolve problems which have developed, the United States does consider that thus far the agreement has provided a workable basis for dealing with most of the varied fishery problems in the North Pacific Ocean. We are confident it will become more effective as the Commission enlarges its knowledge of the important stocks of fish in the area, and develops techniques which will give adequate protection to the legitimate interests of the parties to the Convention.

"In many respects the work of this Commission has reflected great credit on those at the conference table today. Your scientific fact-finding investigations have been outstanding. Due to your work the distribution and movements of salmon in the North Pacific--which could only be guessed at ten years ago--are now in large measure defined. You can take pride in the advances in knowledge resulting from your work.

"However, Mr. Chairman, research is a means to an end, not an end in itself. The knowledge which you have obtained must now be applied to the pressing problems which confront you.

"Let me touch briefly upon a few of them.

"Your scientific studies have shown beyond doubt that the red salmon which spawn in the Bristol Bay area of Alaska migrate widely in the North Pacific Ocean. They inter-

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mingle there with salmon from Asian streams. Because of these circumstances they have become subject to a Japanese fishery. Later, as they approach the spawning streams, these salmon enter the severely regulated United States fishery in the territorial waters of Alaska. This intermingling creates a critical problem--one foreseen in the Protocol to the Convention. Your attempts to solve this problem equitably have been hampered by divergent interpretations of the Protocol. I am confident that in the end you will work out a wise and equitable solution. But, in the meantime, some measures must be taken to meet the immediate problem. In 1962 the situation will be especially critical. The runs are expected to be only a fraction of the runs of 1960 and 1961. It will be difficult to assure that adequate fish reach their spawning grounds so that this fishery upon which the Bristol Bay region of Alaska is so dependent will be maintained. Clearly, restraint is called for. This is a prime consideration of my Government and I must candidly express our concern over it.

"Mr. Chairman, your Commission faces a new and serious problem. Substantial bottomfish operations are already under way in the Bering Sea. If these operations expand into waters to the south, they will jeopardize the conservation of the halibut resources of the eastern North Pacific Ocean. While it is perhaps not the responsibility of this Commission to seek a final solution to this problem, the Commission must, in our judgment, consider what can be done within the scope of its powers to insure the future of this resource. It seems appropriate that the Commission take cognizance of the problem, recognize the need for restraint, and make appropriate recommendations to our Governments.

"These examples, Mr. Chairman, serve to illustrate the problems which we face together in the North Pacific. Cooperation, patience, and sympathetic consideration of each other's interests are needed.

"The challenge before us is a part of the much larger problem facing mankind today--how to utilize the food resources of our globe for the betterment of all. Specifically the challenge is first to manage our highly valued fisheries so as to make them produce for us today. Secondly we must establish principles of sound management for the long run so that our peoples will continue to enjoy the fruits of these fisheries in the future."

NORTHWEST PACIFIC FISHERIES COMMISSION

SOVIET-JAPANESE FISHERY MEETING IN MOSCOW:

The Northwest Pacific Fisheries Commission Science and Technology Subcommittee scheduled a technical meeting of fishery experts to be held in Moscow beginning November 27, 1961. The condition of the salmon, crab, and herring resources in the northwest Pacific area will be discussed.

The Japanese delegates to the meeting were announced in mid-November. The Japanese Fishery Agency was planning to send its Production Division Chief and Laboratory Director of the Inland Sea Regional Fisheries Research Laboratory to the meeting. In addition, a number of industry representatives were designated as delegates to the meeting.

The Japanese fishery experts will negotiate with Russian fishery experts on the preservation and catches of salmon in the North Pacific. These negotiations are designed to lay the groundwork for the annual Soviet-Japan fishery talks scheduled to take place in Moscow in February 1962 to establish salmon catch quotas for the North Pacific. The purpose of the preliminary discussions is to shorten the period of negotiations at the Sixth Annual Meeting of the Commission. (Shin Suisan Shimbun Sokuho, November 14, 1961; United States Embassy, Tokyo, report of November 17, 1961.)

FOOD AND AGRICULTURE ORGANIZATION

COUNCIL AND CONFERENCE MEETINGS:

The world food situation and ways to improve it were discussed when the Council and Conference of the Food Agriculture Organization of the United Nations met.



The Conference of FAO, which meets every second year, held its 11th session to review the work of the past two years and to approve the program and set the budget for the organization's 1962/63 biennium. It met November 4-23, 1961. Deliberations were preceded by an October 30 to November 3 session of the Council, the body which governs FAO between Conference sessions, and by meetings from October 30 to November 10 of the Conference's own technical committees on the specific technical activities included in the over-all program of work.

The Council supervises the work of the FAO, reviews the world food and agriculture situation, and makes recommendations to member governments and other international bodies on measures to improve the food and agriculture organization.

Behind the delegates' discussions on particular subjects was the broad picture of the world food and agricultural situation. The FAO annual report, "The State of Food and Agriculture, 1961," showed that after a succession of two or three good years when food production had moved ahead of population, the increase in production in 1960/61 had been less than the increase in the number of mouths to be fed. Indications are that the production rise in 1961/62 might not be much greater. A statement containing more up-to-

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date information on recent crop developments was presented to the Conference.

The Conference is the chief legislative body of the FAO and normally meets biennially. The chief aims of the Organization, as expressed through the Conference, are to raise levels of nutrition and standards of living, secure improvements in the efficiency of the production and distribution of all food and agricultural products, and better the condition of rural populations. Its membership consists of 82 nations.

MARINE OILS

ESTIMATED WORLD PRODUCTION, 1956-62;

Since 1950, there has been a steady increase in the world production of marine oils (including whale and sperm whale oils and fish and fish liver oils).

Estimated World Production of Marine Oils ^{1/} , Average 1950-54, Annual 1956-62							
1962 ^{2/}	1961 ^{3/}	1960	1959	1958	1957	1956	Average 1950-54
..... (1,000 Short Tons)							
1,265	1,250	1,110	1,120	1,085	1,035	1,110	990
1/Whale, sperm whale, fish, and fish-liver oils.							
2/Forecast.							
3/Partly forecast.							
Source: Excerpted from <i>Fats and Oils Situation</i> , November 1961, FOS-210, Economic Research Service, U. S. Department of Agriculture, Washington, D. C.							

The 1962 production is forecast as slightly greater than in 1961, which in turn is expected to be 140 short tons more than in 1960.

WHALING

NO AGREEMENT ON DISTRIBUTION OF ANTARCTIC WHALE CATCH:

Member countries of the International Whaling Commission have been unable to agree on the distribution of the Antarctic whale catch for the 1961/62 season. The Commission sets the total catch quota, but the participating countries (the U.S.S.R., Japan, Norway, the Netherlands, and the United Kingdom) are responsible for devising a formula to divide the quota. A scheduled meeting of the whaling nations was cancelled when the U.S.S.R. did not respond to invitations from Japan and the United Kingdom. (U. S. Embassy, Tokyo, September 1, 1961.)

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NORWEGIAN EXPEDITIONS
OFF TO ANTARCTIC GROUNDS:

All of the Norwegian whaling expeditions, which include 7 factory vessels and 71 catchers, early in November 1961 sailed for the Antarctic, where the 1961/62 pelagic season started December 12. The total Norwegian quota, decided by the Government, is 5,100 so-called blue-whale units. Last season, Norway had 8 expeditions, which were assigned a quota of 5,800 units. However, 700 units were lost when the *Kosmos III* fleet was sold to Japan. Norway will operate with one more catcher than the same fleets operated in the 1960/61 season. Also the current season opened 16 days earlier than the previous season.

This season, about 4,630 Norwegians will man Norwegian and British expeditions in the Antarctic, as against 5,377 in 1960/61 and 6,152 in 1959/60. Altogether 3,515 work aboard Norwegian whaling vessels as against 3,985 last season. But, despite the reduction in crews, whaling companies have had a hard time manning their ships. With plenty of job opportunities at home, Norwegians are less attracted by far-off Antarctic.

Norwegian expeditions which participated in the 1960/61 Antarctic whaling produced 124,246 metric tons of whale oil as against 109,834 tons in 1959/60. The Norwegian whale oil production was valued at about Kr. 180 million (US\$25.2 million), plus about Kr. 20 million (US\$2.8 million) for byproducts from processing plants in Norway. (*News of Norway*, November 9, 1961.)

OCEANOGRAPHY

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION ADOPTS RESOLUTION:

UNESCO's Intergovernmental Oceanographic Commission at its organizational meeting in Paris, October 19-27, 1961, gave fisheries a good deal of attention.

The Commission adopted a resolution which stated in part "... that oceanographic and fishery research are complementary undertakings and that the Food and Agriculture Organization of the United Nations has the primary responsibility within the United Nations family for fisheries;" and further "... that the Food and Agriculture Organization plans to consider at its forthcoming Conference the establishment of an Advisory Committee on Marine Resources Research."

International (Contd.):

The Intergovernmental Oceanographic Commission, established by the U. N. to promote scientific oceanographic cooperation and to work for the exchange of oceanographic data on a world-wide basis, had some 39 nations in attendance at its first meeting.

The Commission officially requested its members to submit views at its meeting next year in regard to establishing advisory channels in the field of oceanography, including fishery matters.



Australia

AUSTRALIAN FIRM OFFERS TO SELL FISH CANNERIES TO JAPANESE:

An Australian company early in November 1961 approached the Japanese Overseas Fisheries Cooperative with an offer to sell two fish canneries in Australia to Japan. Of the two canneries offered for sale, one cannery with an annual processing capacity of 1,000 metric tons of fish (salmon trout, tuna, and sardines) is located in Melbourne. The other cannery is located on the east coast between Victoria and New South Wales. This plant can process 2,000 metric tons of fish annually.

The sale of the plants would be subject to certain conditions. For example, the purchaser must employ Australian nationals in the canneries. The two canneries now primarily pack sardines and salmon trout. (Suisan Keizai Shimbun, November 3, 1961.)



Canada

BRITISH COLUMBIA HERRING FLEET TIED-UP IN EX-VESSEL PRICE DISPUTE:

The British Columbia herring fishing fleet of 78 purse seiners (operated by reduction plants) has been tied up since October 16, 1961, in an ex-vessel price dispute. But about 15 purse seiners operated by a fishermen's cooperative do not bargain for herring prices and were reported fishing as of mid-November 1961.

The fishermen's union officials at Vancouver, B. C., were asking \$13.00 per ton for reduction herring, an increase of 48 percent above the previous price of \$8.80 per ton. The plant operators countered with an offer of \$9.60 per ton, on the basis that this price represents the current

market price improvement over the 1960 ex-vessel price of \$8.80 per ton.

At a meeting between the price negotiators on October 19, a fishermen's union officer announced that the union membership had rejected the plant operators' price offer of \$9.60 as well as the other proposals. As of the end of October, no further meetings had been scheduled, and according to industry sources the tie-up could last all winter.

The current herring fleet price dispute tie-up is the sixth in nine years, reported as follows: 1952/53 - entire fall and winter season; 1955 - start of season to November 5; 1956 - start of season to December 2; 1957/58 - entire fall and winter season; 1959 - May 1 to October 7; and 1961 - October 16 to ?.

During the period of 1952 to date, British Columbia herring fish meal (generally consists of 70 percent protein) prices have fluctuated widely, from a high of \$2.30 per unit of protein to a low of \$1.30 late in 1960. This represents a range of \$161 to \$91 per ton of herring meal, nearly all downward. As of October 18, the British Columbia herring meal price was \$1.85 per protein unit or \$129.50 per ton, U. S. funds, in paper bags, f.o.b. Vancouver, B. C.

Herring oil has also shown a sharp downward price trend in recent years, from 9.75 cents per pound in the 1956/57 season to a September 1961 low of 6 cents per pound, or a decrease of 33.75 cents per Imperial gallon. It was reported that 60 cars of British Columbia herring oil were sold in the week of September 18 at 6 cents a pound. This very low price on British Columbia herring oil was the result of heavy production of fish and marine oils throughout the world. Icelandic herring oil was being landed in eastern Canada at low prices and the Fisheries Association of British Columbia understood approximately 4,000 tons were sold in Toronto, normally a good market for British Columbia herring oil. In order not to lose the market completely to Iceland, British Columbia producers were forced to reduce their prices to the competitive level of 6 cents per pound f.o.b. Vancouver.

The other demands of the union were: (1) a one-year contract; (2) seine boat operation only (if packers are used a separate agreement must be negotiated); (3) \$16 a ton for herring used for canning, salting, etc. (no change in this price from previous agreement). The plant owners, on the other hand, in addition to the price proposal asked for: (1) a three-week Christmas holiday instead of four weeks; (2) fishing crews wishing to use scows or barges should be permitted to do so where such equipment is available; (3) there be some clarification as to the responsibilities of both parties in the preparation, use, and care of herring seines.

The herring fleet had been receiving \$13.00 per ton in 1959, but in November 1960, eleven months after a sharp decline in world herring oil prices had forced the closure of reduction plants, the Union agreed to resumption of fishing at the current price of \$8.80 per ton.

Notes: Ex-vessel prices paid in British Columbia are not comparable to those paid in the United States since it is believed that plants own the vessels and gear and may provide for some of the expenses.

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BRITISH COLUMBIA HERRING FLEET PRICE AGREEMENT:

An agreement on the fishermen's price for herring delivered to reduction plants of \$10.40 per ton was reached on November 21, 1961, between herring purse-seine fleet fishermen and reduction plant operators in British Columbia. This is an increase of \$1.60 per ton or 18 percent more than the previous price of \$8.80 per ton, paid prior to the fleet

Canada (Contd.):

tie-up on October 16. At that time the fishermen had asked for a price of \$13.00 per ton, and the reduction plant operators countered with an offer of \$9.60 per ton. The agreement ended a 36-day price dispute tie-up (started on October 16, 1961) for most of the British Columbia herring fleet.

The fishermen's price paid for reduction herring is not comparable with United States ex-vessel prices, since the British Columbia plant operators own the vessels and gear and provide for most of the operating expenses.

The price paid British Columbia fishermen for herring to be made into fish meal and oil is divided equally between all crew members (usually 8 persons) including the captain, on a per-ton basis. The only deduction made is for food. In addition to the fishermen's price, the reduction plant operators pay the captains a bonus equivalent to one crew share or \$1.30 per ton, based on the price of \$10.40 per ton.

The landed or ex-vessel price of British Columbia reduction herring after the recent increase was reported between \$20-\$21 per ton which would be comparable with United States ex-vessel reduction fish prices.

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**BRITISH COLUMBIA DOGFISH LIVER
SUBSIDY TERMINATED
NOVEMBER 6, 1961:**

The Canadian Department of Fisheries has announced that the British Columbia dogfish liver subsidy of 12 cents per pound was terminated on November 6, 1961. The announcement stated that the \$150,000 earmarked by the Government to cover the subsidy program for the fiscal year ending March 31, 1962, had been used up by November 6.

Fishermen were reported asking the Department for an additional \$150,000 allotment for the continuation of the subsidy program until March 31, 1962. The Department in Ottawa was reportedly giving consideration to a possible modified dogfish program if additional funds are made available.

At the end of the previous fiscal year (ending March 31, 1961), 990,169 pounds of dogfish livers were landed in British Columbia,

but fishing for dogfish under the subsidy allotment of \$150,000 did not begin until October 1960 that fiscal year. On the other hand, the subsidy allotment for the 1961/62 fiscal year was made early in the year and fishing for dogfish started early in the year.

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**BRITISH COLUMBIA WHALING INDUSTRY
TO RESUME IN APRIL 1962:**

After a two-year closure, Canada's British Columbia whaling industry will be resumed in April 1962.

The decision to resume whaling, which was shut down in 1959 because of high cost of operations and poor world prices for meal and oil, resulted from a merger of a Japanese and British Columbia firm. Under the partnership formed, the whale meat will be processed for human consumption and shipped to Japan. It is also expected that by-products will be sold in North America for mink and pet food. Previously, the whale meat was processed into meal and oil which was unprofitable.

The new Canadian-Japanese operation is expected to produce \$1.5 million per year in the form of jobs, sales, and secondary effects on other enterprises. A total of 170 jobs will be created with 70 on the tenders and 100 shoreworkers. (United States Consulate, Vancouver, November 1, 1961.)

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**NEW BRUNSWICK FISH MEAL PRICES,
OCTOBER 1961:**

Fish-meal prices (60-percent protein) quoted by New Brunswick producers late in October 1961 averaged about C\$120 a short ton (\$2.00 a protein unit) for both exports and domestic sales. The price has remained the same since late July 1961.

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**FISHERMEN'S COOPERATIVE
ASSOCIATIONS:**

On July 31, 1960, there were 80 fishermen's cooperative associations in Canada, compared with 77 on July 31, 1959. Since the latter date, membership declined from 12,000 to about 10,000. The value of fishery products marketed through the cooperatives exceeded \$20 million during the 1960 season, down about \$1 million from the previous sea-

Canada (Contd.):

son. Total assets rose from \$11.6 million to \$12.3 million. The associations' liabilities to the public increased from \$5.1 million in 1959 to \$6.3 million in 1960. However, liabilities to members declined from \$3.3 million to \$2.6 million during the same period.

Quebec, with 28, reported the largest number of fishery cooperatives. British Columbia led in value of catch with \$6.2 million.



Chile

SOUTH AFRICAN COMPANIES MOVE INTO CHILEAN FISHING INDUSTRY:

A South African group of fishing companies (one of the well-known and well-established groups of fishing companies in South Africa and South-West Africa) has announced its intentions to enter the Chilean fishing industry in 1962. The company plans to build a fish meal plant at Iquique in northern Chile. A new company will be registered in that country and a fleet of purse seiners, similar to the pilchard boats used off South Africa and South-West Africa, will be purchased from Chilean boatyards.

The Managing Director of the group was expected to fly to Santiago early in November 1961 for an on-the-spot inspection of the situation. The group will probably purchase its boats from the Chilean subsidiary of a Seattle, Wash., marine construction company. This apparently had not been settled, but it is his understanding that, under Chilean law, the boats must be built there to operate in Chile's coastal waters.

The new plant in Chile will be built by a South African engineering firm. The Managing Director of that firm early in November left Cape Town for Santiago, Chile, and was also expected to visit Lima, Peru. The same company hopes to build fishing industry plants in both countries.

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UNITED STATES FIRM INVESTING IN CHILE'S FISHING INDUSTRY:

The General Manager of a Chilean-based company owned by a Seattle, Wash., marine construction firm has a number of fishery activities in Iquique, Chile.

The Chilean-based firm manages a fleet of three small fishing vessels with a capacity of about 50 tons each. This part of the operation is called "commercial exploratory fishing" and has been quite successful to date (October 31, 1961). The General Manager feels that his boats have definitely proven the superiority of well-equipped and well-managed vessels over the typical boat found in Iquique. He also pointed out that this operational fleet, which has been in operation about one year, has been an effective "traveling advertisement" for the shipyard.

The shipyard operation consists of a production-line boat-building plant set up on the outer mole of Iquique Harbor to build stock fishing vessels. The first keel was laid in July 1961 and the third keel was expected to be laid sometime after October 1961. It was estimated that the first hull was to be launched in late November or early December, and that thereafter one hull will be launched approximately every month.

The Seattle parent company does engineering consulting in such areas as fishing plants, installations, etc. Early in 1961 a study was completed for CORFO (Government Development Corporation) which indicated the feasibility of installing an integrated fish-processing plant in Iquique. CORFO has now taken the first steps in this respect by forming a fishery firm in Tarapaca.

The fishing industry in northern Chile represents a potentially rich and relatively undeveloped natural resource. In recognition of this and in an effort to offset economic disruption caused by the decline of the natural nitrate industry, the Government of Chile has adopted measures to stimulate and attract capital for the fishing industry in northern Chile.

The fact that American capital is being invested in Iquique's fishing industry indicates the potential of the new development policy. Over a period of time the equipment and techniques now being introduced should bring increased catches and development of the fish-processing industry. (October 30, 1961, report from United States Consulate, Antofagasta.)



Denmark

FISH FILLETS AND BLOCKS AND FISHERY BYPRODUCTS EXPORTS, JANUARY-SEPTEMBER 1961:

Denmark exported 7.1 million pounds of fresh and frozen fish fillets and blocks during September 1961--almost 2.9 million pounds more than in September 1960. Only 378,000 pounds, mostly cod and related species, were shipped to the United States in September 1961.

From January through September 1961, Denmark shipped 9.5 million pounds of frozen fish fillets and blocks to the United States, again mostly cod and related species.

Total Danish exports of fresh and frozen fillets and blocks January-September 1961 amounted to almost 54.0 million pounds, an increase of 17.0 million pounds over the same period in 1960. Exports of fillets and blocks of cod and related species increased by 25.7 percent, and flounder and sole exports were up 28.5 percent.

Product	September		Jan.-Sept.	
	1961	1960	1961	1960
 (1,000 Lbs)			
Edible Products:				
Fillets and blocks:				
Cod and related species	1,484	1,582	25,880	20,596
Flounder and sole	3,996	2,466	19,608	15,260
Herring	1,594	-	7,582	-
Other	40	2/171	927	2/1,095
Total	7,114	4,219	53,997	36,951
Industrial Products: (Short Tons)			
Fish meal, solubles, & similar products	5,957	1,897	39,491	29,515
<small>^{1/}Shipments from the Faroe Islands and Greenland direct to foreign countries not included.</small>				
<small>^{2/}Includes herring fillets.</small>				

Denmark's exports of fish meal, fish solubles, and other similar products rose from 1,897 short tons in September 1960 to 5,957 tons in September 1961. Exports of those products for the first nine months of 1961 were 33.8 percent greater than for the same period in 1960.



Fiji Islands

JAPANESE TUNA BASE PLANNED:

The proposed establishment of a Japanese tuna base at Levuka, Fiji Islands, under the plan initiated by a Japanese Liberal Democratic Party member is making steady progress. On November 10, 1961, a general meeting to formally organize the South Pacific Ocean Tuna Fishing Cooperative was held, at which time February 1963 was set as the target date for commencing operations.

Under a four-year plan, the Cooperative will start fishing operations in the first year with

25 65-ton vessels^{1/} and eventually increase the fleet to a total of 100 vessels, at the rate of 25 vessels a year. All catches made by the fleet are to be delivered to a canning company in Levuka, a joint British-Japanese enterprise formed in August 1961 with a capital of 300 million yen (US\$833,000), with each country investing 50 percent.

The Cooperative is to be operated as a self-supporting enterprise and plans call for the emigration of Japanese fishermen to the Fiji Islands. Fishing licenses would be issued to the Cooperative but not to individual vessel owners. These licenses would eventually be transferred to vessel owners. As investors, vessel owners will share in the profits of the Cooperative in proportion to the production of their vessels but will not participate in its management. The head office of the Cooperative is to be located in Tokyo and a branch office established in Levuka.

The above plan to establish a base at Levuka is reported to have been formulated to help the struggling medium and small fishing cooperatives of Japan; however, it is strongly opposed by the three largest Japanese fishing companies which operate tuna mothership fleets in the South Pacific. These three tuna mothership companies fear that the establishment of a tuna base in the Fiji Islands would not only jeopardize the operation of their fleets, but an increase in fishing intensity would result in overfishing and eventually deplete the tuna resources in the area. (Suisan Keizai Shimbun, November 11, 1961.)

^{1/}Earlier press reports indicated that this base would be established under a five-year plan with 20 vessels a year to be assigned to it.



German Federal Republic

NEW FISH REDUCTION METHOD TESTED SUCCESSFULLY:

A new German fish reduction method involving the use of electrophoresis and electrostriction to remove the cellular fluids from the tissue of fish and fish offal has been developed by the German inventor Heinz Doeven-speck in Bremen, according to a United States Consulate report of November 20, 1961, from Bremen. The new method obviates the need for external heat, and permits the extraction of oil and raw protein at temperatures of not over 45 degrees centigrade (113° F.).

The following advantages of the new procedure have been claimed by the inventor: (a) vitamins and essential amino and fatty acids, which are destroyed to a large extent by the conventional cooking process, are

German Federal Republic (Contd.):

saved; (b) the oil obtained under the new method remains fully emulsive; (c) extraction costs may be reduced about 30 percent; (d) the yield of fish oil is about 2-3 percent higher than under the conventional extraction method, while that of meal is about 10 percent higher; (e) "by-taste" of fish is avoided when fish meal produced by the new method is used in meat, egg, and milk production; (f) the required plant can be built from commercially-available equipment, requires about 50 percent less space than conventional plants, and can be installed aboard fishing boats and even on trucks; (g) the generation of undesirable odors is practically eliminated as the result of the low processing temperatures.

In cooperation with the largest West German trawler and fish processing company, the inventor has been conducting large-scale tests for the reduction of fish and fish offal in Bremerhaven during the past few months.

Since the inventor has now applied for patents on his invention in the United States, he is interested in establishing contacts for the utilization of his invention in the United States. He has no definite ideas on the form of utilization which he would prefer. He has entered into an informal understanding with a leading United States producer of fish oil and meal that he will give priority consideration of any offer made by the latter for his invention, if such offer matches or exceeds offers from other United States interests. Interested parties are invited to communicate with the inventor directly.

FISH MEAL PRICES, NOVEMBER 3, 1961:

Prices reported at Hamburg Commodity Exchange as of November 3, 1961, for fish meal delivered ex-Hamburg warehouse, or c. & f. West German sea port were as follows:

Type of Fish Meal	Protein Content (%)	Delivery	DM/Metric Ton ^{1/}	US\$/Short Ton
German	50-55	loco/ prompt	547.50	124.17
"	55-60	" "	557.50	126.44
"	60-65	" "	575.00	130.41
" std. brands	60-65	Nov. 1961	618.50	140.28
" herring	64-68	prompt/Nov. 1961 ^{2/}	640.00	145.15
Peruvian	65-70	prompt/Dec. 1961	535.00	121.34
"	65-70	Jan.-July 1962	532.50	120.77
Angola	65-70	loco	592.50	134.88
"	65-70	Nov. 1961/Jan. 1962	585.00	132.68
Portuguese	50-55	Nov.-Dec. 1961	542.50	123.04
Icelandic herring	70-75	Nov. 1961	675.00	153.09
South African	65-70	Dec. 1961	580.00	131.54
"	65-70	Jan.-Apr. 1962	560.00	127.01

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

Thus far, the capacity of the plant has successfully been tested at a throughput of about 2,500 pounds of raw material per hour. It is expected that this quantity can be increased without difficulty to about 3,500 pounds in the near future.

The inventor stated further that feed tests conducted by chicken farms with fish meal produced by his new method showed that even though the raw protein content of the feed was reduced 50 percent, egg production rose 10 percent because of the superior quality of the fish meal. The new method can also be applied to the processing of meat and oil fruits (olives, papaya, coconuts, etc.). In the opinion of the inventor, the complete absence of odor would make his products, particularly fish flour, suitable for use in those countries where the consumption of animal protein foods meets with religious prejudice. Another promising field of application was seen by the inventor in dairying and animal husbandry. After the separation of butter from milk, the remaining product could be reduced to powder for long-term storage and/or transport to remote destinations, where it could be reconstituted into high-quality milk by the addition of odorless, fully emulsive meat fats produced by the new method. Such reconstituted milk could also be used for cattle feed, particularly calves, and possibly open new fields for using the surplus West European production of skimmed milk and meat fats. The inventor is exploring the possibilities of using his invention in this field with a leading West German lard importer and processor. The application of his invention to the extraction of vegetable oils is being tested by the Spanish Instituto de Grasa y Su-Derivates of Seville.

As compared with October 6, 1961, fish-meal prices on the Hamburg Exchange on November 3, 1961, were mixed, with both domestic and imported fish meal somewhat lower on the average. (United States Consulate, Bremen, November 7, 1961.)

FISH OIL SUPPLIES ARE LIBERAL:

West Germany's imports of edible fish oils reached 32,110 short tons during January-June 1961, somewhat greater than in the same period of 1960. However, warm summer weather caused domestic consumption to decline below the seasonal level in the summer months. Sales of fish oil for local use and export were thus small.

As of mid-year 1961 production of edible fish oil in West Germany, and several other European countries, was running ahead of 1960. The resulting build-up in fish oil supplies caused some foreign buyers to withhold purchases in hopes of lower oil prices. German importers of fish oil adopted a similar

German Federal Republic (Contd.):

stand with the hope that United States and Peruvian fish oil prices would decline under the weight of heavy oil supplies. The United States and Peru are the major suppliers of fish oil to West Germany. (Foreign Crops and Markets, November 13, 1961, U. S. Department of Agriculture.)

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FISH BODY OIL MARKET:

Although October 1961 sales of fish body oils increased somewhat over those of the previous month, they continued sluggish and prices were depressed, according to the leading importer of fish oil in Bremen.

It is estimated that the West German production of edible fish body oil in 1961 will reach about 25,000 metric tons as compared with 23,700 tons in 1960. Prices for

terdam or Scandinavian ports. Reportedly, the Peruvians have begun to ship their fish oil in bulk in shiploads of about 10,000 tons to West European ports. The local trade source has estimated that Peruvian fish oil production will probably increase from about 100,000-105,000 metric tons in 1961 to about 140,000 tons in 1962.

The price at which United States menhaden oil was offered for sale early in November dropped to about \$116-\$118 per metric ton (5.3-5.4 U.S. cents a pound) c.i.f. Rotterdam or Scandinavian ports. (United States Consulate, Bremen, November 3, 1961.)

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FOREIGN TRADE IN FISH BODY OILS, JANUARY-JULY 1961:

West Germany's imports of fish body oils during the first 7 months of 1961 totaled 32,502 metric tons valued at US\$4.9 million, an increase of 7 percent in quantity but a decrease of 2 percent in value as compared with the first 7 months of 1960.

Table 1 - Federal Republic of Germany Imports and Exports of Edible Fish Body Oils

Country of Origin	Imports								
	August 1961			% of Total by Weight August		Average Prices ^{2/}			
	Quantity	Value ^{1/}		1961	1960	1961	1960	1961	1960
Metric Tons	1,000 DM	US\$ 1,000	(Percent)		(DM/Metric Tons)		(U.S.¢/Lb.)		
Belgium-Luxembourg	15.7	9	2	0.3	-	573	-	6.5	-
Denmark	850.3	518	129	17.2	4.8	609	679	6.9	7.7
Netherlands	148.6	88	22	3.0	3.8	592	606	6.7	6.9
Norway	1,494.3	1,123	281	30.3	10.6	752	761	8.5	8.6
Portugal	18.3	10	3	0.4	-	546	-	6.2	-
United States	427.0	255	64	8.7	49.8	597	679	6.8	7.7
Chile	323.0	173	43	6.5	-	536	-	6.1	-
Peru	1,655.7	987	247	33.6	17.2	596	646	6.8	7.3
Total August 1961	4,932.9	3,163	791	100.0	-	641	-	7.3	-
Total August 1960	6,409.4	4,359	1,090	-	1/86.2	-	680	-	7.7
Country of Destination	Exports								
	August 1961			% of Total by Weight August		Average Prices ^{3/}			
	Quantity	Value ^{3/}		1961	1960	1961	1960	1961	1960
Metric Tons	1,000 DM	US\$ 1,000	(Percent)		(DM/Metric Tons)		(U.S.¢/Lb.)		
Netherlands	203.4	112	28	6.3	11.3	551	654	6.2	7.4
Norway	3,011.5	1,827	457	93.7	39.9	607	661	6.9	7.5
Total August 1961	3,214.9	1,939	485	100.0	-	603	-	6.8	-
Total August 1960	1,312.5	870	218	-	4/51.2	-	663	-	7.5

1/ Believed to be the value at port of entry in Germany.
2/ Other countries: Iceland - 10.7 percent; Angola - 3.1 percent.
3/ Believed to be the value at port of shipment in Germany.
4/ Other country; Sweden - 48.8 percent.
Source: Federal Office of Statistics, Wiesbaden.

German fish body oil are currently at about DM 460 per metric ton (5.2 U.S. cents a pound) ex factory. It is expected that about 70-80 percent of the West German production of fish body oil will be exported in 1961, as in previous years, although at considerably reduced prices.

The price of Peruvian semirefined fish oil dropped further during October 1961. According to a Bremen trade source, Peruvian oil early in November 1961 was offered at \$114 per metric ton (5.2 U.S. cents a pound) c.i.f. Rot-

The average c.i.f. import value declined from 7.4 U. S. cents a pound during 1960 to 6.77 cents a pounds for the first 7 months of 1961. Heavy imports of anchovy oil from Peru during 1961 (up 13,982 metric tons or 156 percent from the same period of 1960) depressed prices to below United States mar-

German Federal Republic (Contd.):

Origin	January-July 1961			January-July 1960		
	Quantity	Value		Quantity	Value	
	Metric Tons	Deutsche Marks 1,000	US\$ 1,000	Metric Tons	Deutsche Marks 1,000	US\$ 1,000
United States	920	621	155	9,742	6,708	1,608
Denmark	-	-	-	1,045	710	170
United Kingdom	-	-	-	359	245	59
Iceland	598	407	102	200	142	34
Netherlands	1,092	612	153	961	621	149
Norway	1,502	1,338	335	1,824	1,507	361
Portugal	1,241	778	194	1,347	857	205
Angola	1,783	1,014	254	2,838	1,904	456
S. Africa Republic	-	-	-	1,334	924	222
Canada	280	217	54	948	699	168
Chile	1,708	949	237	851	548	131
Peru	22,968	13,591	3,398	8,986	6,181	1,482
Other Countries	410	231	58	-	-	-
Total	32,502	19,758	4,940	30,435	21,046	5,045

^{1/}Includes West Berlin.

ket prices. Consequently, West Germany's imports of fish body oils (mostly menhaden) from the United States decreased by 8,822 metric tons, or 91 percent during the first 7 months of 1961 (see table 1).

same time in 1960. A total of 64 net herring boats were operating off those coasts. Some of the fish was transferred to trawlers and shipped on ice to West Germany. Other herring was frozen, particularly for Czechoslo-

Table 2 - West Germany's Exports of Edible Fish Body Oils, January-July 1961 and 1960

Destination	January-July 1961			January-July 1960		
	Quantity	Value		Quantity	Value	
	Metric Tons	Deutsche Marks 1,000	US\$ 1,000	Metric Tons	Deutsche Marks 1,000	US\$ 1,000
Denmark	-	-	-	790	534	128
Netherlands	1,267	791	198	1,110	779	187
Norway	3,490	2,153	538	3,987	2,748	659
Sweden	5,008	3,042	761	4,286	2,926	701
United Kingdom	505	314	78	-	-	-
Total	10,270	6,300	1,575	10,173	6,987	1,675

Later in the summer menhaden oil producers in the United States lowered their prices to compete with Peruvian oil, which resulted in a substantial increase in shipments to Germany during August and the fall months of 1961. (United States Consulate, Bremen, October 6, 1961.)



Iceland

FISHERY TRENDS AS OF NOVEMBER 1961:

As of early November 1961, Iceland's southwest coast winter herring season had been proceeding more favorably than at the

vakia and East Germany, and the rest was salted or used for fish meal and oil. The news of a contract with Poland for delivery of 20,000 barrels of salted herring was announced.

During the week of November 6, 1961, Icelandic trawlers reported record high prices for sales of fresh fish on ice at Grimsby, England. Good prices for fresh fish on ice were also received at West German ports. Poor fishing weather in the North Sea was reportedly the reason for the high prices. (United States Embassy, Reykjavik, November 9, 1961.)

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Iceland (Contd.):

FISH PRODUCTION, JANUARY-JULY 1961:

How Utilized	January-July	
	1961	1960
.. (Metric Tons) ..		
Herring^{1/} for:		
Oil and meal	113,758	65,857
Freezing	9,445	1,368
Salting	50,542	12,369
Fresh on ice	4,119	645
Groundfish^{2/} for:		
Fresh on ice landed abroad	16,312	11,798
Freezing and filleting	99,409	144,252
Salting	59,876	63,462
Stockfish	42,040	50,470
Home consumption	4,751	5,102
Oil and meal	2,378	3,610
Shellfish for:		
Freezing: Lobster	1,287	1,196
Shrimp	304	-
Canning (shrimp)	126	-
Total production	404,347	360,129
1/Whole fish.		
2/Drawn fish.		



Iran

IMPORTS OF MOST FISHERY PRODUCTS PROHIBITED:

Import regulations for the Iranian Year 1340 (March 21, 1961 to March 20, 1962) established an over-all import quota for all commodities. Imports of all goods except those on the prohibited import list may be imported free of licensing controls. But most fishery products are on the prohibited import list. Included are all canned fish, crustaceans (such as shrimp and lobster, prepared and preserved), mollusks, caviar and fish eggs and the like, as well as fish meal. Since fresh and frozen fish and other types of fishery products are not mentioned specifically in the prohibited list nor in the list of goods subject to the commercial profits tax, it is assumed that those products may be imported free of licensing controls.



Israel

THREE NEW DEEP-SEA TRAWLERS PLANNED:

Israel's Department of Fisheries has announced the approval of plans for the construction of three new deep-sea trawlers which will cost between I£1.0 million and I£1.5 million (US\$1.8 and \$2.7 million) each. They will be ordered from foreign shipyards for delivery in 1963.

This step is seen as a confirmation of an earlier policy decision to boost fishing in international waters. Plans call for operating one of the new vessels in the Canary Islands fishing grounds in the Atlantic. The second, a tuna clipper, will operate in the Indian Ocean off Madagascar and the coast of Africa. The third will be a large trawler to fish in the Red Sea, with Eilat as its home base.

Israel's Ministry of Agriculture has also approved an I£300,000 (US\$540,000) fishing boat pier at Eilat, which will include cold-storage facilities to handle catches from the Red Sea. (United States Embassy, Tel Aviv, report dated November 22, 1961.)



Ivory Coast

U. S. COMPANY INVESTS IN FISH PLANT:

A California canning firm, in a 50-50 venture with private French capital, has concluded an agreement with the Ivory Coast Government to construct tuna freezing and storage facilities at the port of Abidjan. Construction of the facilities is expected to cost the new company in the Ivory Coast about US\$400,000. The plant will have capacity for freezing 130 tons per day, storage for 1,300 tons, and ice plant with a capacity of 60 to 80 tons per day.

The new firm will subcontract the actual fishing to French and Spanish fishermen, operating from 40 to 50 boats, and will also buy fish from Japanese vessels in the area.

The plant will be located at the old Abidjan port rather than at the new port to be completed in 2 or 3 years by the Government of Ivory Coast. Production will be possible in a short time with prefabricated storage and freezing units. (United States Embassy, Abidjan.)



Japan

FISHERY AGENCY UNDERTAKES TUNA PRODUCTION AND MARKETING STUDIES:

According to recent Japanese press reports, Japanese Minister of Agriculture and Forestry Kono conferred with U. S. Secretary of the Interior Udall regarding Japanese exports of tuna to the United States during the

Japan (Contd.):

latter's visit to Japan to attend the Joint Economic Meeting held in Tokyo in November 1961. Minister Kono is reported to have stated to Secretary Udall that restrictions placed by the United States on imports of Japanese tuna and increased exports of canned tuna to the United States by other countries are presenting serious problems to the Japanese tuna industry, and the Minister discussed the possibility of increasing exports of frozen tuna and canned tuna to the United States. Secretary Udall is reported to have stated that this was a matter which required further study, to which Minister Kono agreed.

Accordingly, Minister Kono has instructed the Fishery Agency to undertake a study of Japanese tuna production potential and market conditions. The Agency has made the study and is expected to submit a full report to Minister Kono shortly.

Latest press reports state that the Agency scheduled a preliminary meeting for November 21 to develop basic guides for the study. Reportedly, the Japanese hope to predict the demand for tuna in the United States as far ahead as 1970 and to estimate the amount of tuna that Japan can produce to meet this demand. (Shin Suisan Shimbun Sokuho, November 21, 1961; and other publications.)

* * * * *

TUNA INDUSTRY PROPOSES LOBBY IN UNITED STATES:

The Government-Industry meeting of the Japanese Export Promotion Council convened on November 9, 1961, to discuss among other proposals, a frozen tuna industry proposal that negotiations at government levels be conducted in an effort to remove import restrictions imposed by foreign countries on Japanese tuna exports and that lobbyists be actively employed in the United States to block any movement aimed at tightening United States import restrictions on Japanese frozen tuna. The tuna industry also recommended the establishment of joint fishery bases abroad to regulate the tuna market. The marine products canning industry urged the Government to seek measures to relax, and if possible, remove tariff barriers of the United States and European countries.

This meeting was attended by Prime Minister Ikeda, International Trade and Industry

Minister Sato, Foreign Minister Kosaka, Finance Minister Mizuta, Agriculture and Forestry Minister Kono, Transportation Minister Saito, Bank of Japan President Yamagiwa, and other Government leaders. The fishing industry was represented by the President of Taiyo Fishing Company. (Shin Suisan Shimbun Sokuho, November 10, 1961; Suisan Keizai Shimbun, November 10, 1961.)

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PRODUCERS ASSOCIATION PLANS TO INCREASE FROZEN TUNA EXPORT QUOTAS TO UNITED STATES:

On October 24, 1961, the Japanese Export Frozen Tuna Producers Association's Board of Directors adopted the following proposals on frozen tuna direct export quotas to the United States for the current Japanese fiscal year:

- (1) Increase yellowfin exports from the present 30,000 short tons to 35,000 metric tons;
- (2) establish a special combined quota of 5,000 metric tons for yellowfin and albacore, with time and method of allocation of said quota to be determined by the Board of Directors;
- (3) increase tuna loin exports by 1,200 metric tons. Of this amount, 600 tons shall be allocated at the same time that the special quota of 5,000 tons indicated in (2) are allocated, and the remaining 600 tons of loins set aside as a special quota.

The above proposals were to be considered for adoption at a special general meeting of the Producers Association on November 7. If adopted, the new quotas would go into effect December 1. (Shin Suisan Shimbun Sokuho, October 26, 1961.)

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FROZEN TUNA AND SWORDFISH EXPORTS TO UNITED STATES TO BE INCREASED:

The Japanese Export Frozen Tuna Producers Association's Board of Directors held a special general meeting on November 7, 1961, and adopted the following proposals on frozen tuna exported from Japan proper to the United States:

1. Increase the yellowfin tuna export quota by 5,000 short tons, from the present 30,000 short tons to 35,000 tons. This increase of 5,000 tons will be allocated as follows: 4,000 tons on the basis of past performance records and 1,000 tons unassigned (so-called free quota).

Japan (Contd.):

2. Establish a separate special quota of 5,000 short tons for albacore and yellowfin tuna, the allocation of which shall be determined by the Association's Board of Directors.

3. Increase the tuna loin export quota by 600 short tons, from the present 3,500 tons to 4,100 tons. This increase of 600 tons will be allocated as follows: 570 tons on the basis of past performance records and 30 tons unassigned. Establish an additional special loin quota of 600 short tons, the allocation of which shall be decided by the Board of Directors.

4. Increase the frozen swordfish export quota by 1,000 short tons, from the present 5,500 tons to 6,500 tons. This increase of 1,000 tons shall be allocated as follows: 875 tons according to past performance records; 120 tons unassigned, and 5 tons to newly authorized exporters. In addition, establish a special 500-ton quota, the allocation of which shall be determined by the Board of Directors.

The increases in export quotas mentioned, with the exception of the special quotas (albacore-yellowfin tuna quota of 5,000 tons; loin quota of 600 tons, and swordfish quota of 500 tons), became effective December 1, 1961. However, it was reported that the Japanese Frozen Foods Exporters Association doubted the value of increasing the frozen swordfish export quota to the United States by 1,000 short tons (really 1,500 tons if the special quota of 500 tons is added). It considered a maximum of 700 tons to be a more reasonable increase, and while the swordfish export quota has been increased by 1,000 tons effective December 1, actual shipments may not likely exceed 700 tons. (Suisan Tsushin, November 8, 1961.)

Translator's Note: The following table shows current Japanese export quotas of frozen tuna destined for the United States, including the increases effective December 1:

Japanese Frozen Tuna Export Quotas		
Species	Shipments to U. S. from	
	Japan Proper	Transshipments
 (Short Tons)	
Albacore	30,000	5,000
Yellowfin	35,000	30,000
Yellowfin-albacore	5,000	-
Tuna loins ^{1/}	4,700	-

^{1/}Includes special quota of 600 tons.

FROZEN SWORDFISH EXPORT QUOTA TO UNITED STATES INCREASED:

The Japanese Export Frozen Tuna Producers Association early in November 1961 tentatively decided to increase the frozen swordfish export quota for the United States to 6,500 short tons in view of the increasing demand for swordfish in the United States. This is an increase of 1,000 tons over the previous 5,500-ton quota set in March 1961 for the Japanese fiscal year (April 1961-March 1962).

Normally, by the end of October, close to 1,000 tons of frozen swordfish remain in stock, but in 1961 the supply of swordfish was used up by the end of September. The 1961 fiscal year quota of 5,500 tons for export to the United States was allocated as follows: April-September, 2,750 short tons; October-December, 1,375 short tons; January-March, 1,375 short tons. (Shin Suisan Shimibun Sokuho, November 4, 1961.)

TUNA FISHING CONDITIONS IN EASTERN PACIFIC, OCTOBER-NOVEMBER 1961:

The Marine Research Laboratory of Tokai University, Japan, early in November 1961 issued a report on tuna fishing conditions in the eastern Pacific the latter half of October and early November 1961.

Fishing in the vicinity of 107° to 114° W. longitude and 0° to 3° N. latitude averaged 5 tons per day per vessel. Fishing was also at the same rate west of 120° W. longitude. Big-eyed and yellowfin tuna made up the bulk of the catches.

Fishing continued since mid-October in the vicinity of 115° to 118° W. longitude and 4° to 5° S. latitude, averaged 5.2 metric tons per day per vessel. Fishing in other areas was slow. (Suisan Keizai Shimibun, November 10, 1961.)

FISHING FIRMS HOPE TO IMPORT FROZEN TUNALIKE FISH FROM SOUTH AFRICA:

Now that the Japanese Government liberalized trade in marine products beginning October 1, 1961, the major Japanese fishing companies are reported to be seeking ways and means of importing frozen tunalike fish and spearfish to Japan. Domestic demand for tuna is expected to be good and a shortage is expected, especially for tuna used in the production of fish ham and sausage.

Japan (Contd.):

The large companies appear to be most interested in importing spearfish, for which there is no export market. Spearfish can be imported from South Africa for about \$300 a metric ton delivered to Japan, and Japanese firms seem to want to import spearfish particularly from Formosa, Australia, and the coastal countries of South Africa. Already one large fishery firm is reported to have imported frozen spearfish from an undesignated foreign country. (Shin Suisan Shimbun Sokuho, October 26, 1961.)

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RECORD TUNA TRIP AT YAIZU:

In October 1961 the Japanese long-liner Fukuhisa Maru No. 8 (408 tons) established the highest landing record of a single tuna vessel since the establishment of the Yaizu fish market in Shizuoka Prefecture. The vessel landed Indian (bluefin) tuna, including big-eyed, caught off Mexico. In three days it unloaded 330 metric tons valued at \$91,000.

The previous highest record was 155 tons valued at \$81,389 landed by the Showa Maru No. 2 in August 1960.

The ex-vessel market price of Indian (bluefin) tuna ranged from a high of \$679 a metric ton to a low of \$163 a ton, but most of it sold at \$175 a ton because of purchases by packers. The better grades were sold to Kansai buyers at an average of about \$201 per ton. (Japanese periodical.)

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JAPANESE TO EXPLORE FOR NEW TUNA RESOURCES OFF CEYLON:

A November 1961 report indicated that a two-man team of Japanese fishery experts would be dispatched to the Maldive Islands to conduct exploratory work in January 1962 in accordance with an agreement reached between Japan and the Maldive Dependency of Great Britain.

The Maldive Islands located near the southeastern tip of India are reported to have a population of approximately 90,000, of which 70 percent are engaged in fishing (primarily for skipjack tuna) and processing of marine products.

In addition, the Japan Overseas Fisheries Cooperative Association planned to charter

the Shizuoka Prefectural Fisheries Research Laboratory's research vessel Fuji Maru (191 gross tons) to survey the waters off Ceylon, Nicobar Islands, and the Maldive Islands for a period of approximately three months beginning November 16, 1961. The vessel would investigate skipjack resources and the presence of live bait in an effort to develop new fishing grounds for the Japanese tuna fishing industry. This study would cost approximately 3.2 million yen (US\$8,900), of which the Japanese Ministry of Agriculture would contribute 50 percent. (Shin Suisan Shimbun Sokuho, October 28 and November 4, 1961; Suisan Keizai Shimbun, October 25, 1961.)

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FREIGHT RATES FOR CANNED TUNA SHIPMENTS TO UNITED STATES BOOSTED 6 PERCENT:

A 6-percent increase in freight rates for Japanese shipments of canned tuna to the United States was reportedly approved for November 1, 1961, to April 30, 1962, by the Japanese Freight Conference. Freight rates for canned salmon and canned crab were to be raised by 10 percent from November 1, also. Thus, the freight charges for canned tuna will be about two cents less per case than for other canned fishery products. The new freight rates for canned marine products are:

	Destination		
	Pacific Coast	Atlantic Coast	Overland Common Points
(US\$/Short Ton).....		
Old Rate:			
Canned tuna	24.25	30.00	22.50
New Rate:			
Canned tuna	25.75	31.75	24.25
Others ^{1/}	26.75	33.00	22.75

^{1/}Includes products such as canned salmon and canned crab.

Freight rates for frozen tuna shipped from Japan proper to the United States remained unchanged. As of late October freight rates for frozen tuna were: \$57.75 a short ton for albacore, skipjack, yellowfin, big-eyed, and bluefin; \$78.75 for tuna loins; and \$68.25 for tuna fillets. As for freight rates for frozen tuna shipments from the Atlantic Ocean to Japan, the Japanese Freight Conference informally approved the continuance of current freight rates. This decision was based on the Japan Frozen Tuna Sales Company's contention that the 7.5-percent increase in freight charges recommended by the Freight Conference would result in an excessive increase in the sales price of frozen tuna. (Shin Suisan Shimbun, November 4, 1961; Suisan Tsushin, October 23, 1961.)

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Japan (Contd.):

FROZEN SABLEFISH SHIPPED TO U. S.:

Japanese fishing companies since the summer of 1961 have been encouraging exports of frozen sablefish or silver cod caught in the North Pacific. As of mid-October 1961 a total of 180 short tons had been contracted for export. The buyers are on the west coast of the United States (130 tons) and Hawaii (50 tons).

The price is 20-22 U. S. cents a pound c. & f. for large fish more than 5 pounds each, and fish weighing less than 5 pounds are offered 4 to 5 cents cheaper.

Since frozen sablefish are used for smoking and large fish caught with long line are preferred, the amount available for export is small and demand is expected to exceed the supply. (Suisan Tsushin, October 21, 1961.)

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SURVEY SHOWS LARGER TUNA VESSELS BEING CONSTRUCTED:

Data compiled by the Japanese National Federation of Tuna Cooperative Associations show that the number of vessels of 40 and 180 tons gross in the Japanese tuna fleet is diminishing steadily, while the number of vessels over 180 tons gross is increasing. Vessels between 40 and 180 tons gross are being used for replacement purposes to construct larger distant-water vessels of over 180 tons gross, which the Japanese consider more efficient.

Vessel Size (Gross Tons)	1960	1959	1958	1957
40-70	167	179	207	200
70-100	341	387	415	422
100-180	279	327	365	389
180-240	70	66	59	50
240-350	121	98	82	73
Over 350	151	130	115	109
Total	1,129	1,187	1,243	1,243

^{1/}Does not include tuna vessels under 40 tons gross, which do not require licenses; and 40- to 80-ton vessels which engage in other fisheries.

Table does not include tuna vessels in the 40- to 80-ton range which engage in other types of fishing or former salmon vessels which have switched to tuna fishing. Those types of vessels total 266, of which 49 are former salmon fishing vessels. (Suisan Keizai Shimbun, November 8, 1961.)

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FISH MEAL FACTORYSHIP DEPARTS FOR ANGOLA:

The Japanese fish meal factoryship Renshin Maru (14,094 gross tons) departed Japan for Angola, Africa, on October 30, 1961. This voyage was expected to take 30 days. The Renshin Maru will remain on the fishing grounds for about 70 days until early February 1962, during which time she will be anchored within six miles off the Angolan coast. Her production target is 7,300 metric tons of fish meal (of which 2,300 tons are to be turned over to Angola), 1,500 metric tons of fish solubles, 1,000 tons of fish oil, and 1,500 tons of frozen fish.

The Renshin Maru normally operates as a fish meal factoryship in the eastern Bering Sea during the summer months. For the first time the vessel is being sent to the waters off Angola to process anchovies for fish meal.

Under arrangements worked out between Angola and Japan, Angolan fishermen will sell their catches to the factoryship. About 40 Angolan vessels will be assigned to supply anchovy to the factoryship and 14 trawlers will deliver to the factoryship fish for freezing. Fish caught by the catcher vessels will be transferred to the Renshin Maru by means of 4 fish pumps, which were installed on the factoryship just before her departure at a cost of 5 million yen (US\$14,000) each.

The two 120-ton trawlers which will work in conjunction with the Renshin Maru departed Japan on October 20. The two vessels will explore grounds beyond the territorial waters of Angola primarily for shrimp. (Suisan Tsushin, October 23, 27, and 31, 1961.)

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ANTARCTIC FISHERIES RESOURCES TO BE STUDIED:

The Japanese Ministry of Education announced late in October 1961 that biological research and observation of the Antarctic will be carried out with the Tokyo Fisheries College training ship Umitaka Maru. The ship was to sail from Tokyo at the end of October, returning in March 1962.

The investigation will be carried out every other year by a team of 11 in the sea area between 20° east longitude, and 50° west longitude.

The subjects of observation include various problems relative to resources and potential

Japan (Contd.):

fisheries, including beam-trawling, and oceanic observations from the Antarctic to Cape Town, Africa. (Suisan Keizai Shimbun, October 27, 1961.)

FISHING ACTIVITIES IN THE BERING SEA:

Catch statistics released by the Japanese Fishery Agency show that for the period April-October 1961 the 33 Japanese mothership-type bottom trawl, long-line, and gill-net fleets which operated principally in the north central and eastern Bering Sea landed a total of 621,114 metric tons of fish and 96,410 crabs.

The Japanese Northern Waters Mothership Association has decided to organize a council to regulate and

COMMERCIAL FISH HATCHERIES AND FISH FARMS:

Although Japan is surrounded by seas and is renowned for its marine fishing ingenuity, it is still unable to meet the growing domestic demand for certain kinds of fish. Encouraged by this demand, commercial fish culture in Japan has made remarkable progress.

Unique fish-culture projects include those for eels, shrimp, and turtles--products which are considered essential to Japanese cuisine. Hatcheries for such expensive fish as sea bream and mullet are also doing well. Eels are widely appreciated for their rich taste as well as for their abundant vitamin A content, which is 300 times that of beef. Shrimp are used in the cuisine of practically all nations, and in Japan, the demand is exceedingly good as it is an essential ingredient for "tempura" (shrimp dipped in a special batter and deep-fat fried). Turtles are regarded by epicurians as an effective tonic food as well as a delicacy. These three products are sold at fancy prices on the Japanese market.

Japanese 1961 Bering Sea Landings by Species and Fishing Areas

Species	Fishing Areas ^{1/}					Total
	A ^{2/} (May-Oct.)	B ^{2/} (Apr.-Sept.)	C (May-Oct.)	D (May-Oct.)	E (Apr.-Oct.)	
..... (Metric Tons)						
Flatfish	305	1,333	47,538	665	404,122	453,963
Halibut	1,995	6,248	2,762	-	-	11,005
Cod	1,541	2,861	631	214	1,517	6,764
Alaska pollock	69	193	979	343	22,820	24,404
Sablefish	3,630	8,420	6,683	6,723	770	26,231
Rockfish	1,383	1,586	1,494	1,796	4,284	10,543
Shrimp	145	143	71	9,601	265	10,225
Herring	23,251	48,511	44	28	426	72,260
Others	29	372	113	3,056	2,149	5,719
Total	32,348	69,667	60,815	22,431	436,353	621,114
..... (Number)						
Crabs	75,346	20,064	-	-	1,000	96,410

^{1/}Key to fishing areas:
 Area A: Between 170° E. and 175° E. longitude.
 Area B: Between 175° E. and 180° longitude.
 Area C: Between 180° and 175° W. longitude.
 Area D: Between 175° W. and 170° W. longitude.
 Area E: Area east of 170° W. longitude.
^{2/}Catch from these two areas mainly off bank between Cape Olyutorski and Cape Navarin.

coordinate the bottom trawl, long-line, and gill-net fishery in the Northern Waters (refers to the Okhotsk Sea, Bering Sea, and the North Pacific Ocean). To be formed by the 8 companies belonging to the Association and 3 other fishing companies, this council will be established within the Association and placed under the supervision of the Administrative Chief of the Northern Waters Mothership Association. The Association plans to admit into the council long-line and gill-net fishermen not now members of the council who plan to fish in Northern Waters.

The stern trawlers No. 50 Akebono Maru (1,425 gross tons) and No. 51 Akebono Maru (1,475 gross tons) departed Kurihama, Japan, for the eastern Bering Sea on November 10 and 11, 1961, respectively. These two vessels were expected to fish the grounds near the Pribilof Islands for about 50 days. (Nippon Suisan Shimbun, November 13, 16, and 18, 1961.)

Today, there are 760 eel-raising farms in the country, mostly in the Hamanako Lagoon in Central Japan, where river water pours into the sea. In this area alone, 2,200 metric tons of eels are produced annually, with sales totaling some US\$2,800,000. These "farm-raised" eels are shipped to major cities where demand for broiled eels continues to grow. To show how popular broiled eels are, the Tokyo classified telephone directory lists nearly 1,000 eel specialty restaurants, some of which have enjoyed thriving business for more than 300 years.

Demand for shrimp is increasing rapidly, not only for the traditional "tempura" dishes but also for Chinese cuisine. As much as US\$670,000 worth of this particular shellfish had to be imported in 1960 alone to meet the growing demand. The acute and continued shortage of the domestic shrimp supply has stimulated the development of shrimp hatcheries and one hatchery recently succeeded in raising shrimp and marketing them at less than half the competitive price. These shrimp are now shipped by plane from a shrimp farm in Shikoku, Central Japan.

Japan (Contd.):

This shrimp-farm project was developed by Dr. Fujinaga, who previously served in the Government as director of the Research Bureau of the Fisheries Agency. Upon retiring from active service in September 1954, he opened a shrimp farm in Shikoku beside the Seto Inland Sea, utilizing a salt farm which had been closed. After confirming that 2,000,000 shrimp can be hatched from the eggs of a single female shrimp, he started raising shrimp in a special tank, and is now shipping grown shrimp to Tokyo every day. He is planning to present 50,000 female shrimp to both of the neighboring prefectures of Okayama and Kagawa. It is expected that the shrimp farms in Central Japan will eventually be able to produce 2,000 tons of shrimp a year.

"Suppon" or soft-shell turtles are generally believed to be a tonic food, but they are also a delicacy when prepared by an expert chef. The domestic supply of "suppon" is also too small to meet the growing demand and the price is always high. Despite the difficulties encountered in artificial raising, there are six "suppon" farms, mostly in the "Paradise of Hatcheries," the Hamanako area in Central Japan. In a typical farm, they are hatched and raised in ponds. There is a different pond for each age group ranging from one-year-olds through five-year-olds.

The commercial hatchery business is booming in Japan today. Aside from those already mentioned, there are numerous commercial hatcheries and farms for such freshwater fish as salmon and trout, carp, sweet-fish ("ayu"), bullfrogs, and others. Among salt-water fish culture, oyster farming is most prevalent, producing some 20,000 tons of oyster meats annually, followed by laver and kems (seaweed), and clams. (Japan Report, November 15, 1961, Japan Information Service, Consulate General of Japan, New York, N. Y.)

Note: See *Commercial Fisheries Review*, March 1960 p. 68.



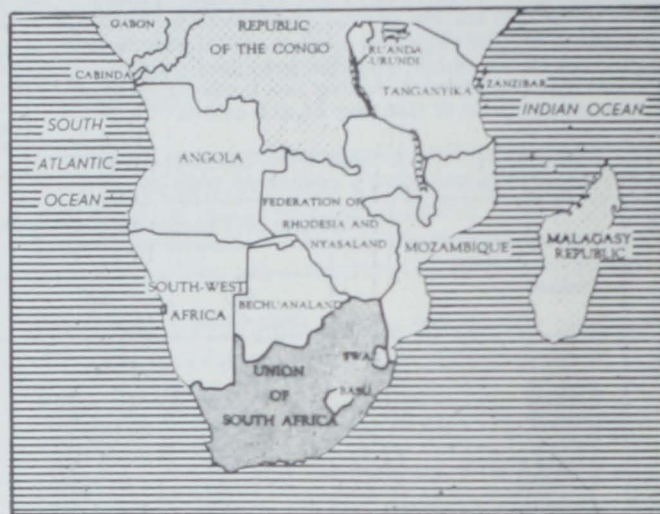
Malagasy Republic

TUNA CANNING DEVELOPMENTS:

A French company, which has small canning plants at Majunga, Diego Suarez, and Tamatave, has been negotiating with the Chinese Nationalist Tuna Fishing Fleet which has operated well off the Malagasy Republic (formerly Madagascar) coast for a considerable time, to furnish 140 metric tons of tuna. The Chinese have been ready to supply this amount for some time but have been held up by the firm who was expected to be ready to accept the tuna in December 1961. The firm intends canning the tuna and marketing it in Europe and the United States to determine whether a local tuna fishing and canning industry can be made to pay.

It is reported that previously an attempt was made to firm up arrangements with Japanese tuna vessels whereby they would furnish a trial lot of tuna and at the same time the Japanese would train Malagasy fishermen. This fell through because the Japanese wish to be paid for their catch in hard cur-

rency, a condition to which the Malagasy could not agree. The Chinese fishing fleet is reported to be willing to accept CFA francs. This may be due in a measure to the fact that if the establishment of a local tuna industry is possible, the Chinese fleet would then base on Diego Suarez, working out of that port, rather than returning to Formosa to dispose of their catch, a voyage which now requires about three months.



The Special Fund of the United Nations is further examining the fishing possibilities of Madagascar and has as a first approach the idea of setting up a school for training fishermen, this school to be a subdivision of the Agricultural College. The school would turn out monitors capable of instructing fishermen and of organizing and directing cooperatives.

Those who have interested themselves in this subject agree that the possibility of a paying fishing industry in Madagascar will depend less on the techniques and organization, as important as these may be, than on the finding of markets and the ability to compete with other suppliers of fish. Local consumption can be increased but probably not to the point where the transportation and refrigeration facilities required would be justified. Foreign markets must be found and held.

In addition to tuna fishing, attention is being given to the possibilities of exploiting the shrimp available off the Madagascar coast. This latter will require refrigerating and freezing facilities, calling for considerable capital outlay. (United States Operations Mission, Malagasy Republic, October 21, 1961.)



Mexico

SHRIMP EXPORTS TO U. S. MUST MEET MINIMUM FOOD AND DRUG STANDARDS:

Reliable sources in the shrimp industry in Mazatlan, Mexico, have stated that a notice received from the U. S. Food and Drug Administration states that effective November 13, 1961, all shrimp imported into the United States must meet the minimum standards set by that agency.

Responsible elements in the industry have realized for years that their product was not up to required standards but have been able to do nothing about it. It is believed that the freezing plants in general are satisfactory or with relatively little expense may be brought into line. The trouble lies in the boats and the handling of the shrimp before it reaches the packing houses.

When unloaded in port the boats return to the fishing grounds as quickly as possible without having their holds adequately cleaned. Frequently the catch is not handled properly immediately upon being hauled in. Because of a bonus system which provides a premium for a capacity catch the ships stay out as long as possible. (Report from United States Consulate, Mazatlan, November 8, 1961.)



Morocco

CANNED FISH EXPORT TRENDS:

Moroccan exports of canned fish have steadily expanded. The final results of the 1960/61 season (June 1, 1960-May 31, 1961) showed exports of 2,331,451 actual cases as compared to 2,066,569 cases for the previous season. Exports in the 1960/61 season consisted of: sardines 1,984,572 cases, tuna 130,988 cases, and other canned fish 215,981 cases. France, Italy, West Germany, and Ghana were the principal buyers of Moroccan canned fish products.

The current season (began June 1, 1961) got off to a good start with exports during June and July at a record high--425,351 cases as compared to 294,171 cases for the same two months the previous season. June and July 1961 exports consisted of sardines 304,369 cases, tuna 17,225 cases, and other canned fish 67,757 cases.

While prospects for the industry were good, the sardine packers expressed some worry over their privileged position in the French market. They fear that Portugal will follow the United Kingdom into the Common Market thus causing the Moroccan sardines to lose their competitive advantage, deriving from their admission free of French customs duties. (U.S. Embassy, Rabat, October 23, 1961.)



New Zealand

TUNA INDUSTRY PLANNED:

New Zealand is planning to start a tuna industry, according to the Governing Director of a New Zealand fishing firm. "The fish are available in our waters and we're going to develop our own industry," he said.

As a preliminary, private enterprise and the Government will combine in a 12-month tuna survey off New Zealand. The New Zealand survey will follow the pattern of similar surveys in Australia. In Australia fishermen have learned to follow tuna at the start of the season off the coast of New South Wales to Port Lincoln in South Australia. The Director of the New Zealand firm said New Zealand fishermen know that tuna abound off the North and South Islands and would follow them around and endeavor to establish their habits. He said that as tuna was not sold "fresh," it would probably be canned. (Fish Trades Review, September 1961.)



Nicaragua

SHRIMP FISHERY TRENDS:

A French shrimp fishing company, located at El Bluff on the Atlantic Coast, has been in serious financial difficulty and its operations are virtually at a standstill. Although other shrimp companies continue to export, shipments remain at a low level.

On the Pacific Coast, however, a United States shrimp firm has made an apparently successful start. It shipped 35,000 pounds of shrimp in September 1961 and plans to construct a processing plant near Corinto. (United States Embassy, Managua, October 25, 1961.)



Nigeria

JAPANESE-NIGERIAN JOINT FISHERY ENTERPRISE AT LAGOS:

A large Japanese fishing company is planning to establish a joint fishing base at Lagos, Nigeria. Total capital investment for this base is reported to be 50 million yen (US\$139,000), with Japan contributing 30 percent and Nigeria 70 percent. Of the Japanese share, the Japanese fishing company and another Japanese firm are contributing 50 percent each. The Nigerian share is to be put up by the Nigerian Government and a Nigerian shipping and trading company.

The base facilities will include a 500-ton capacity cold-storage plant. Construction of the plant is to be financed with approximately 500 million yen (US\$1.4 million) to be borrowed from the Japanese Overseas Fisheries Cooperative Fund, and negotiations over this matter the latter part of October 1961 were being conducted between the Governments of Japan and Nigeria. By agreement, this cold-storage plant may also be used by Japanese fishing vessels other than those fishing directly for the base.

The Japanese fishing company planned to dispatch a pair of two-boat trawlers to Nigeria in mid-December 1961. Eventually, a total of six trawlers, each of 100 tons gross, are to be based at Lagos. Annual production target for the fleet is 6,000 metric tons of croaker, for which a preliminary selling price of 60,000 yen (US\$167) a metric ton has been agreed on.

Concerning the construction of cold-storage plants elsewhere along the coast of West Africa, the same Japanese fishing company is constructing a 2,000-ton capacity cold-storage plant in Monrovia, Liberia, together with an Italian firm. This plant is scheduled to be completed in August 1962. (Shin Suisan Shimbun Sokuho, October 27, 1961.)



Norway

NORWAY-SOVIET TALKS ON NORWEGIAN FISHING LIMITS END:

Norwegian and Soviet negotiators have concluded talks at Oslo on continued permission for Soviet fishing craft to operate inside the Norwegian fishing zone between 6 and 12

nautical miles. Views of the two delegations will next be considered by their respective Governments.

Soviet negotiators maintained that there was a difference of principle between the Russian 12-mile territorial limit and the Norwegian 12-mile fishery limit. In their opinion, a Soviet commitment to buy Norwegian fish and fish products for several years could serve as a basis for an agreement on Soviet fishing rights.

The Norwegian delegation maintained that the reciprocal principle applied by Norway in these and similar negotiations involve a reasonable opportunity for Norwegian fishermen to operate in waters between 6 and 12 miles off the coast of the other nation. Whether the limit is called territorial or fishing limit makes no difference. (News of Norway, November 30, 1961.)

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FROZEN FISH EXPORTS INCREASE:

The Norwegian cooperative sales organization Norsk Frossenfisk A/L, whose brand frozen fish is now exported to 30 foreign countries, reported total sales of Kr. 94.8 million (US\$13.3 million) in the fiscal year that ended June 30, 1961. Since 1959, sales increased about Kr. 24 million (US\$3.4 million).

Frozen fish exports in 1960/61 earned about Kr. 80 million in foreign exchange, or about Kr. 7 million (US\$11.2 million) more than in the preceding fiscal year. Of the 27,900-ton total production, 25,200 tons were exported.

The largest single market is in the United States where the sales organization's products are sold by a subsidiary in Jersey City, N. J. Another subsidiary will expand its fish stick plant at Mobile, Ala., to meet growing demand in the United States.

In its annual report, the sales organization says that a Norwegian link with an enlarged Common Market (EEC) is of the utmost importance to the nation's frozen fish industry. An EEC link might have certain disadvantages, but they are trivial compared with the difficulties that would follow if Norway were to stay outside the trade organization. (News of Norway, November 4, 1961.)

Note: See Commercial Fisheries Review, February 1960 p. 86.

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Portugal

CANNED FISH EXPORTS, JANUARY-JUNE 1961:

Portugal's exports of canned fish during the first half of 1961 amounted to 29,378 metric tons, 13 percent more than in the same period of 1960. Sardines accounted for 82.4 percent of the 1961 exports, followed by anchovy fillets with 8.2 percent.

Portugal's principal canned fish buyers in the first half of 1961 were Germany with 6,033 tons, followed by Great Britain with 3,594 tons, and the United States with 3,397 tons.

Product	January-June			
	1961		1960	
	Metric Tons	1,000 Cases	Metric Tons	1,000 Cases
In Oil or Sauce:				
Sardines	24,212	1,274	22,244	1,170
Chinchards	791	41	412	21
Mackerel	278	11	125	6
Tuna and tunalike . .	1,258	45	997	36
Anchovy fillets . . .	2,699	270	2,062	206
Others	140	7	154	7
Total	29,378	1,648	25,994	1,446

In June Portugal exported a total of 4,842 tons of canned fish--sardines accounted for 76.8 percent of that total. Also during June, exports to the United States consisted mainly of canned sardines (208 tons), anchovies (101 tons), tuna and tunalike fish (98 tons), and mackerel (5 tons). (Conservas de Peixe, August 1961.)

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CANNED FISH PACK, JANUARY-JUNE 1961:

Portugal's total pack of canned fish in oil or sauce for the first half of 1961 amounted to 16,115 metric tons, an increase of 4,306 tons or 36 percent over the same period in 1960. The sardine pack and the anchovy fillet pack combined accounted for 83.1 percent

Product	January-June			
	1961		1960	
	Metric Tons	1,000 Cases	Metric Tons	1,000 Cases
In Oil or Sauce:				
Sardines	9,314	490	6,114	322
Chinchards	641	34	288	15
Mackerel	533	21	119	4
Tuna and tunalike . .	2,621	94	2,934	104
Anchovy fillets . . .	2,842	285	2,119	212
Others	164	9	235	12
Total	16,115	933	11,809	669

of the total pack. Substantial increases were noted in 1961 in the packs of anchovy fillets, sardines, and mackerel. There was a decrease of 10 percent in the pack of tuna for the first 6 months of 1961.

During the first half of 1961 sardine landings (for canning and other purposes) in Portugal totaled 20,847 tons. Landings of species used for purposes other than canning were 1,848 tons of anchovies, 705 tons of mackerel, and 828 tons of tuna and bonito. (Conservas de Peixe, August 1961.)



South Africa Republic

FISH MEAL MARKET TRENDS, OCTOBER 1961:

After a few very quiet months the South African fish meal market resumed active trading in October 1961. The following prices were obtained from a reliable source in the industry:

In October 1961, 900 long tons were sold to West Germany at a price of US\$126.20 per long ton, c.i.f.

In the same month, 10,000 long tons were sold to the United Kingdom at a price of 15 shillings per protein unit, which works out for 65 percent protein meal to roughly \$135 a long ton, c.i.f. United Kingdom ports, for delivery up to the end of 1961.

In November 1960, it was reported by the South Africa Fishmeal Producers' Association that its representatives had sold £1,000,000 (US\$2.8 million) worth of fish meal to Communist East Germany; the quantity sold was not stated. Later information shows that the sale totaled 50,000 metric tons at £1,750,000 (\$4.9 million), or about \$98 per metric ton.

Although no sale has been concluded with the South Africans yet, it is understood that the East Germans have estimated their 1962 requirements at 100,000 metric tons and that they will buy at least 50,000 tons from South Africa and the rest from Peru. The East Germans prefer the South African product, but the International Fishmeal Exporters' Organization does not favor letting them buy the entire lot from South Africa. It is estimated that a price within the range of \$120-

South Africa Republic (Contd.):

125 per metric ton will probably be finally agreed upon.

Sales were being made early in November 1961 to British buyers for 1962 production on a basis of 15s. 6d. (almost \$2.17) per protein unit; the buyer is guaranteed a minimum of 60 percent protein but payment is made on the actual protein content of the meal as determined by analysis of the shipment.

On the export quota system now in effect, South Africa's basic quota is 160,000 metric tons and all the members of the International Fishmeal Exporters' Organization agreed to export 20 percent less than their quota in 1961. South Africa exceeded her figure of 128,000 metric tons by roughly 10,000 tons and it is still undecided whether this will be debited against her 1962 quota. The 1962 quotas have been set at the base quota minus 15 percent or, for South Africa, 136,000 metric tons.

The domestic price of South African fish meal remains as previously reported: £38 (\$106.40) a short ton.

The bulk of South African fish meal is officially reported to have a digestibility content of 94 percent; a negligible quantity tests out at less than 92.5 percent so that the latter figure could almost be guaranteed. (United States Consulate, Cape Town, report dated November 6, 1961.)



Taiwan

JAPANESE TO CONSTRUCT TWO TUNA LONG-LINERS:

Two 550-ton tuna long-line vessels are scheduled to be constructed at Shimizu, Shizuoka Prefecture, Japan, for a Taiwan fishing company at a cost of 155 million yen (US\$431,000) each. They are expected to be completed about February 1962, and will be based at the north Formosan fishing port of Keelung. The Taiwan fishing company plans to operate the two vessels in the Indian Ocean and hopes to export part of the vessels' catches to the United States. (Suisan Keizai Shim-bun, November 15, 1961.)



U.S.S.R.

FISHING ACTIVITY ON GEORGES BANK:

In early October 1961, 20 Soviet trawlers and 15 drift gill-netters were sighted fishing mainly for herring, on the Northern Edge of Georges Bank. At that time, no United States fishing vessels and only 4 Canadian scallop draggers were present in the area. Later in the month, as many as 75 to 100 Soviet vessels were reported in the vicinity.



Russian "Maiakovski"-type stern trawler fishing on the "Northern Edge" of Georges Bank in October 1961. Leading portion of cod end being hauled up the stern ramp of the trawler.

A large Soviet factory-trawler (280 to 350 feet in length) caught approximately 8,000 pounds of fish in two hours of stern trawling. Two types of drift gill-netters (150-200 feet long) were present; some of the larger ones were equipped to trawl over the side during the daylight hours when not gill-netting. Each morning catches were transferred from the drifters to two cargo ships (tenders) anchored nearby.

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EMPHASIS IS ON LARGE VESSELS FOR FISHING:

High-seas fleets of motherships, factory-trawlers, and other craft produced over three-fourths of the 1960 Soviet catch.

Fishing vessels now being constructed are large, improved types, such as the Leskov

U. S. S. R.:

and Maiakovski factory-trawlers of 3,600 metric tons displacement, and motherships of up to 19,500 tons. Twenty-three vessels of the Leskov class have been ordered from Gdansk, Poland; this shipyard has delivered 8 vessels of this type. The vessels are equipped with 4 German filleting machines designed to fillet various sizes of fish. With similar equipment, Maiakovski-type vessels are being built at Nikolaev on the Black Sea. Five have been delivered, with the number on order unknown. Both types of stern factory-trawlers are operating in the North Atlantic and in waters off West Africa.

Two classes of motherships are now being constructed in Polish shipyards for the Soviets. The newest displaces 19,500 metric tons and will be able to stay at sea for 75 days. It is designed mainly to support herring operations, but can be diverted to processing groundfish. The vessels have stern ramps similar to whalers or factory-trawlers to bring aboard catches in cod ends left by fishing vessels. The other type of mothership displaces 17,000 metric tons and 8 have been delivered from Polish yards with 11 more on order. This ship is manned by a fishing and processing crew of 270.

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AUTOMATION FOR FACTORY-TRAWLERS:

At Leningrad, electronic computers have been developed to operate gear, engines, and processing equipment on large Soviet factory-trawlers. The computer, aided by underwater television, will regulate the trawl depending on depth of fish concentrations. A 5,000-ton trawler, equipped with a computer, will require a crew of only 22; it reportedly will be almost five times more efficient than present trawlers and reduce production costs by 70 percent. (The Fishing News, September 29, 1961.)

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NEW BREED OF SALMON DEVELOPED:

Fish breeders on the U. S. S. R. island of Sakhalin (north of Japan) reportedly have evolved a new type of salmon from the masu and humpback species. The new breed weighs more than three times its progenitors at any stage of development and grows to a weight of about 10 pounds. The Soviets have done extensive research on the breeding and trans-

planting of Pacific salmon. (World Fishing, October 1961.)

**United Kingdom**REPORT OF FISHERIES STUDY GROUP:

In January 1961, the Minister of Agriculture, Fisheries and Food, announced that Fishery Ministers proposed to set up a small study group to consider what grant-aided experimental work should be done to help the British fishing industry to meet the new conditions they would have to face over the coming years. This group held a number of meetings since March 1961, and submitted its first report to Ministers early in November 1961. The group made a preliminary survey of the experimental work which might be desirable in connection with the design of new vessels; conversion of existing vessels; development of freezing at sea; development of new equipment and gear; exploration of new fishing grounds; and exploitation of species of fish not at present consumed in quantity in this country.

The Group thinks that a good deal more experimental work needs to be done on the design of vessels suitable for freezing fish at sea, and that the best method of assistance is for grants to be given in suitable cases, for the building of experimental vessels on the condition that full information is made available to the industry. The White Fish Authority has already recommended and obtained Government approval for one such project, and has other possibilities in mind. The Group also thinks that experimental work should be done on the possibility of converting orthodox distant- or middle-water trawlers for freezing and that this might, in the first instance, be investigated through paper studies commissioned by the White Fish Authority.

The Group also considers that the research work on the development of freezers with improved performance now being done at the Torry Research Station should be accelerated and that the White Fish Authority and the D.S.I.R. should investigate, possibly in conjunction with the aircraft industry, the possibility of developing compact and lighter refrigerating machinery for use in trawlers.

In the field of new equipment and gear the Group selected two matters as the most important for early investigation. The first is further work on fish-working machinery, for gutting and filleting. Much has already been done, but the Group thinks more is required, particularly on machines for use on board ship. The second is investigation of lighter and improved trawling gear which would enable trawlers, particularly in the middle-water fleet, to fish rough grounds now inaccessible to them.

The Group also considered that further exploratory voyages, both by research vessels and by commercial trawlers, to test new grounds were desirable, and have recommended that such voyages should be planned to cover the following areas: an area in the Barents Sea; the Dohrn Bank off east Greenland; the coast of Labrador; and an area off the south-west coast of Norway. In addition, the Group considered that experimental voyages on herring trawling, particularly for middle-water vessels, should be planned. The White Fish Authority and the Herring Industry Board are considering the necessary action on these recommendations.

Finally, the Group surveyed the possibilities of experimental work on the catching and marketing of species of fish not at present consumed in considerable quantities in this country. It considered that some work should be done on ocean perch, both on methods of handling and preparation of the fish on board, and on marketing. It suggested that the Torry Research Station should undertake work on the former, in association with the White Fish Authority.

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ty, and that the Authority should consider the possibility of a pioneer marketing experiment when conclusions had been reached on the best way to present ocean perch to the public.

Some of the projects recommended by the Group will need to be examined by the White Fish Authority and the Herring Industry Board. On the basis of their examinations, the Authority and the Board will submit to the Ministers for approval those projects for which they think satisfactory arrangements can be made.

The Group will continue to meet from time to time to consider the possibility of other experimental work. One particular matter which it proposes to consider at its next meeting is whether further experimental work needs to be done on "expedition fishing" and the transfer of fish at sea.

The Group had the following terms of reference: "To give advice on what grant-aided experimental work is required for the purpose of making available to the white fish industry information primarily needed for the development of distant and middle water fishing, and what priorities should be given to such work." (United States Embassy, London, November 3, 1961.)

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FISHERY LOANS INTEREST RATES REVISED:

The British White Fish Authority announced that as a result of changes in the rates of interest charged to them by the Treasury, their own rates of interest on loans made as from October 14, 1961, were:

Fishing vessels of not more than 140 feet, new engines, nets and gear: On loans for not more than five years, $6\frac{3}{8}$ percent (decrease $\frac{1}{2}$ percent); for more than five years but not more than 10 years, $6\frac{3}{4}$ percent (decrease $\frac{1}{4}$ percent); for more than 10 years but not more than 15 years, 7 percent (decrease $\frac{1}{8}$ percent); and for more than 15 years but not more than 20 years, $7\frac{1}{8}$ percent (decrease $\frac{1}{8}$ percent).

Processing plants: On loans for not more than 15 years, 8 percent (decrease $\frac{1}{4}$ percent); and for more than 15 years but not more than 20 years, $7\frac{3}{4}$ percent (no change). The rates on advances made before October 14 are unchanged.

On October 30, 1961, another revision was announced by the White Fish Authority.

Vessels not more than 140 feet, for new engines, nets, and gear: Loans not more than five years, $6\frac{1}{2}$ percent, a decrease of $\frac{1}{8}$ percent; more than five years but not more than 10, $6\frac{5}{8}$, a decrease of $\frac{1}{8}$; more than 10 years but not more than 15, $6\frac{3}{4}$, a decrease of $\frac{1}{4}$; more than 15 years but not more than 20, $6\frac{7}{8}$, a decrease of $\frac{1}{4}$.

Processing plant rates remained the same. (The Fishing News, October 27 and November 10, 1961.)

Note: See Commercial Fisheries Review, November 1961 p. 67.



TRANQUILIZER DRUG STIMULATES SHARKS

A skin-diving team fired tranquilizing drugs into sharks off Cronulla, Australia, in an attempt to stun them. Instead, the drugs stimulated the sharks.

A team member said: "It was a disappointing experiment. The drugs we used actually speeded up the sharks."

The shark hunters are experimenting with a variety of drugs in the hope of finding one which will reduce the menace of sharks to underwater fishermen and professional divers. A doctor accompanied them. (IPFC Current Affairs Bulletin, December 1960.)