International

EUROPEAN ECONOMIC COMMUNITY

EEC COMMISSION WANTS TO MOVE UP TIMETABLE FOR CUSTOMS UNION:

The Commission of the European Economic Community (EEC) presented on October 2, 1964, in Brussels to the six member states a proposal to hasten the removal of intra-Community trade barriers and the completion of the common external tariff.

Dubbed "Initiative 1964," the proposal would bring the common external tariff for the EEC into effect on January 1, 1966, a year earlier than planned. At the same time, the size of internal EEC tariff cuts would be increased and all internal tariffs on industrial goods abolished by January 1, 1967. The initiative was offered to stimulate EEC decision-making.

The EEC Commission's initiative contained the following proposals:

(1) establish the common external tariff on January 1, 1966;

(2) speed internal tariff cuts to complete the customs union by January 1, 1967;

(3) abolish indirect obstacles to trade within the EEC, particularly all controls at internal frontiers;

(4) adopt a proposal for the progressive introduction of a monetary union;

(5) intensify work in the social field.

The Commission will also submit, possibly before January 1, 1966, proposals concerning definition of origin and customs values, anti-dumping and compensatory duties, common arrangements for processing traffic, the unification of national provisions on free entry on economic grounds, and bonded warehouse and free ports. The Commission will also propose a procedure for operating EEC tariff quotas and rules for the uniform application of the common external tariff.

The aim of the proposals, the Commission said, is the free movement of goods between EEC member states, beginning 1967. (European Community Bulletin, October 1964.)

FISH MEAL

WORLD PRODUCTION, SEPTEMBER 1964:

World fish meal production in September 1964 was lower than that in any previous month in 1964 due mainly to seasonal declines in the major producing countries.

World fish meal production in the first 9 months of 1964 was considerably above that in the same period of 1963. The increase was due largely to expanded production in Peru which accounted for about 49 percent of world output during January-September 1964. Higher production during January-September 1964 was also reported in Norway, South Africa, Chile, Iceland, and Angola. The increase was partly offset by lower production in Canada and the United States.

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

World Fish Meal Production by Countries, January-September 1963-1964

Country	Sept. 1964	Sept. 1963	Jan.-Sept. 1964	Jan.-Sept. 1963
	(Metric Tons)			
Canada	2,985	5,495	39,696	52,030
Denmark	12,620	10,478	82,571	80,443
France	1,100	1,100	9,900	9,900
German Fed. Republic	6,521	7,591	57,176	58,207
Netherlands	1/	1,200	2/ 3,500	4,700
Spain	1/	2,178	1/	16,912
Sweden	889	672	5,300	4,535
United Kingdom	5,185	6,077	58,223	58,241
United States	19,658	22,229	167,450	3/178,807
Angola	6,376	1,280	42,073	17,774
Iceland	15,693	13,277	102,245	77,337
Norway	12,257	14,086	146,815	102,085
Peru	49,478	47,828	1,059,070	826,673
So. Afr. (incl. S.-W. Afr.)	18,300	21,669	236,792	218,323
Belgium	375	375	3,375	3,375
Chile	10,777	2,438	114,236	75,019
Morocco	4,000	1/	17,150	1/
Total	166,214	157,973	2,145,572	1,784,361

1/Data not available.
2/Data available only for Jan.-June 1964.
3/Revised.
Note: Japan does not report fish meal production to the International Association of Fish Meal Manufacturers at present.

International (Contd.):

FOOD AND AGRICULTURE ORGANIZATION

FISHERY PROBLEMS DISCUSSED AT 11TH SESSION OF INDO-PACIFIC FISHERIES COUNCIL:

Numerous facets of fisheries research and the fishing industry in general, were considered and discussed at the 11th Session of the Indo-Pacific Fisheries Council (IPFC) of the Food and Agriculture Organization (FAO), held at Kuala Lumpur, Malaysia, October 16-31, 1964. Attention was focused mainly on problems confronting Asian countries, with emphasis on the conflicts arising between large-scale trawlers and inshore fishermen.

On certain problems relating to the fishing industry in Malaysia, the Council recommended that: (1) Malaysia should carry through with its present experiment for trawling in the waters around Pulau Langkawi; (2) a loan fund should be established to assist inshore fishermen in developing new fishing techniques, such as trawling, to improve catches; (3) research should be carried out to assess groundfish resources in relation to the amount of fish caught; and (4) appropriate measures should be adopted to prevent overfishing.

During the session, FAO spokesman announced the FAO was planning to establish a separate fisheries department in its organization. The Regional Information Advisor of that Organization stated that FAO is planning to make documentary films, tape recordings, and reports on fishing activities in that part of the world.

At the session, a Canadian Colombo Plan expert attached to the Planning and Research Branch of the Ministry of Agriculture and Cooperatives, suggested that the Government should take over the marketing of fish initially to release the middleman's grip on fishermen in developing countries

Member countries participating in the Conference included Australia, Ceylon, France, India, Japan, Korea, Malaysia, Netherlands, Pakistan, Philippines, Thailand, United Kingdom (for Hong Kong), the United States, and Viet-Nam. Two nonmember countries, New Zealand and Norway, and six international organizations sent observers. The international organizations included the General Fisheries Council for Mediterranean (GFCM), the International Oceanographic Commission (IOC), Pacific Science Association (PSA), Pan Indian Ocean Science Association (PIOSA), the United Nations Technical Assistance Organization Board (UNTAB), the United Nations Educational, Scientific, and Cultural Organization (UNESCO) and the Food and Agriculture Organization (FAO). Burma, Cambodia, and Indonesia did not participate. (United States Embassy, Kuala, Lumpur, November 5, 1964.)

Note: See Commercial Fisheries Review, December 1964 p. 73

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SARDINE-TAGGING SEMINAR:

How best to tag the tiny sardine, and then what to do with the tag once it has been recovered, was discussed by 18 Mediterranean sardine scientists at a meeting held in Split, Yugoslavia, November 2-14, 1964. The seminar on sardine tagging in the Mediterranean was sponsored by the Food and Agriculture Organization (FAO).

The sardine is of very significant commercial importance to the fishing nations of the Mediterranean. Tagging is a basic tool for determining the growth, distribution, migration, habits, mortality rate, stock, and population size of the fish. Yet the sardine is one of the most difficult fish in the world to tag.

At the seminar, the scientists hoped to work out a model program--including methods of tagging and tag recovery, suggestions for improving cooperation between the various countries--to be presented before a session of the General Fisheries Council for the Mediterranean to be held in Rome in March 1965. (Food and Agriculture Organization, Rome, October 28, 1964.)

INTERNATIONAL NORTH PACIFIC FISHERIES COMMISSION

11TH ANNUAL MEETING:

The 11th Annual Meeting of the International North Pacific Fisheries Commission (made up of representatives from Canada, Japan, United States) was held in Tokyo, Japan. The plenary sessions started November 16, 1964. The meeting extended over nearly 4 weeks, with 3 weeks of scientific sessions preceding the week of plenary sessions.

The Commission reviewed the results of conservation programs and scientific research on North Pacific fishery resources and discussed their implications for the fishing indus-

International (Contd.):

tries of the three countries. Nearly 100 administrators, scientists, technical and industrial advisors and observers took part in the discussions, which centered around the general problem of ensuring the continued orderly development of the North Pacific fisheries resources under effective conservation safeguards.

At this meeting the Commission did not recommend any change in the list of stocks of fish under the "abstention" provisions of the North Pacific fisheries convention.

One of the Commission's major concerns at this meeting was with the condition of the halibut resource of the Eastern Bering Sea, where in 1964, for the second year, the Commission was responsible for regulating a fishery shared by fishermen of the three countries. In the 1964 fishing season, halibut fishermen of the three countries were able to catch only about one-third of the catch quota of 6,393,340 pounds set by the Commission. In view of this and other evidence that the Bering Sea halibut resource is at a low ebb, the Commission recommended to its Member Governments that fishing in the quota area be limited to only 7 days, and the open season in other parts of the Eastern Bering Sea will also be shortened. Other regulatory measures were approved for recommendation to the Governments by the Commission.

The Commission has also been concerned in recent years with the problems created by the developing fisheries for the shrimp and bottomfish, such as flounder, ocean perch, and sablefish (black cod), in the Gulf of Alaska. At this year's meeting the Commission noted that development of the trawl fisheries by Japan has been proceeding gradually and with due regard to their effects on the halibut fishery. The results of research on this problem, as reported to the Commission at the annual meeting, held out hope that proper selection of fishing gear and operating techniques will minimize damage to the halibut stocks as the rich resources of other bottomfish come under increased exploitation. Research on those problems and exchange of scientists and data will be continued. In this connection, the Japanese representatives offered to facilitate studies of bottomfish by Canadian and United States scientists aboard Japanese trawlers in the Gulf of Alaska.

The Commission, which during recent years has examined the condition of the king crab fishery of the Eastern Bering Sea to determine whether conservation measures are needed, noted that the Governments of Japan and the United States have recently negotiated an agreement regarding that fishery. In response to requests from the two Governments, the Commission resolved to continue and to strengthen its program of king crab research.

At the 11th Annual Meeting the Commissioners heard reports of further progress in the publication of results of the research carried on by Commission scientists over the past 10 years. One of the major elements in this publication program is a nine-part comprehensive report on the biology of North Pacific salmon written jointly by scientists from the three countries. The writing of this major contribution is largely finished, and several sections are scheduled for publication in 1965.

The 12th Annual Meeting of the International North Pacific Fisheries Commission will be held at Seattle, Wash., with the first plenary session scheduled for November 8, 1965. The new Chairman of the Commission will be Edward W. Allen of the United States, the new Vice-Chairman will be A. W. H. Needler of Canada, and the new Secretary will be Iwao Fujita of Japan.

INTERNATIONAL NORTH PACIFIC
FISHERIES CONVENTION

CANADIAN FISHERIES MINISTER REPORTS ON OTTAWA RENEGOTIATION TALKS:

The third round in a series of talks between Canada, Japan, and the United States on the International Convention for the High Seas Fisheries of the North Pacific Ocean, which opened in Ottawa, September 9, 1964, ended on October 1.

While considerable progress was made at the meeting with respect to exchange of views and the study of proposals in efforts to resolve remaining differences between the three Parties to the Convention, it was decided by the delegations that complete agreement on modification of the treaty under which the Pacific Fisheries Commission was established in in 1953 could not at that time be reached. The meeting was adjourned with recommendations to the Governments that a fourth meeting be convened at a later date for the purpose of reaching final agreement.

International (Contd.):

At the October 1, 1964, meeting of the Canadian Parliament, Canada's Minister of Fisheries gave a report on the negotiations held in Ottawa for the revision of the North Pacific Fisheries Convention. In his statement the Minister said that the Canadian delegation put forward its best efforts to bring about an agreement, and that valuable progress had been made toward the solution of the remaining differences which he hoped would be reconciled at a later meeting. The statement of the Canadian Minister of Fisheries to the House of Commons follows:

"Mr. Speaker, hon. members will recall that when the estimates of the Department of Fisheries were before the house last week I promised that at the conclusion of negotiations which were taking place here in Ottawa among Canada, Japan and the United States for the revision of the north Pacific fisheries convention I might be able to make a statement to the house.

"At the opening session of the Ottawa negotiations I expressed the hope on behalf of the Canadian delegation that this third meeting of the parties to the international north Pacific fisheries convention would resolve the remaining differences and would culminate in a successful conclusion of the protracted negotiations. Three weeks of uninterrupted negotiations have brought the parties very close to agreement, but it has not been possible to reconcile all the remaining differences, and the delegations have agreed to a recess in the discussions in order to study and recommend to their respective governments other approaches to the unsolved problems.

"We had hoped that final agreement could have been reached for the revision of the existing convention which, of course, continues in force but which may be terminated upon twelve months' notice by one of the parties. At the same time we realize that the problems with which the delegations have been faced are very complex, and that all must be solved before agreeing on a convention which we hope will remain in force for many years. The frank and co-operative attitudes of the delegations have permitted much progress and encourage us to hope that we shall reach agreement at our next meeting.

"I should like to give, for the information of the house, a very brief résumé of the Canadian position. The salmon runs to our streams are of the very highest importance to the fisheries of Canada's Pacific coast. We believe that through scientific study, strict regulation and positive fish culture methods we have maintained these stocks which would otherwise have disappeared. We believe that the salmon resource can be greatly increased by the application of scientifically based techniques which are now emerging. But this maintenance and increase of the runs require not only that we continue our intensive efforts in research, regulation and culture, but that we also continue, at considerable cost to our economy, the protection of our rivers from other uses which would make them unsuitable for salmon. To justify all these costs of maintaining and, we confidently expect, increasing the salmon resources the benefits must accrue to the Canadian economy.

"During the past three weeks much progress has been made toward agreement which would meet our needs in an acceptable manner. It seems that, on the one hand, the basis for the Canadian position is now well understood and is given sympathetic consideration. On the other hand we realize that recognition of our special interests must be contingent on continuation of our special efforts to maintain and increase the salmon stocks and on continued full utilization by our fishery, and that the situation must therefore be subject to review by the commission established by the convention. We have been very close to agreement which would embody these essential points.

"The greatest unsolved problem is concerned with conservation measures for those stocks of North American salmon which now are fished on the high seas. Although the problem applies especially to sockeye of Alaska origin, Canada has a potential interest in a solution which could be applied to other stocks fished on the high seas although to a much more minor degree. We are also concerned by the growing scientific evidence that the high seas fishing of salmon stocks which are intensively fished inshore may be wasteful.

"It appears that we are close to agreement on a formula which would be acceptable in so far as the major halibut producing areas are concerned. This formula would recognize the long history of research and regulation by the international Pacific halibut commission on behalf of the governments of Canada and the United States, and the resulting successful restoration and maintenance of the important halibut fishery. We had hoped that similar protection could be extended to other areas where the stocks have been the subject of similar study and regulation and are utilized by our fishermen. This must now be a matter for further discussion.

"Regarding herring, we hope that a satisfactory solution can be reached as herring is not of significant importance to Japan.

"To conclude, I am satisfied that the Canadian delegation, to whom I am very grateful, has put forward its best efforts to bring about agreement which would provide the greatest measure of protection to those Pacific coast fisheries which are the mainstay of our fishing industry in British Columbia. I am also encouraged by the valuable progress that has been made toward the solution of the remaining differences, and hope that these may finally be reconciled at the next meeting."

Note: See Commercial Fisheries Review, December 1964 p. 79; November 1964 p. 67; September 1964 p. 55.

International (Contd.):

INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA

SYMPOSIUM PLANNED ON ECOLOGY OF PELAGIC FISH SPECIES IN ARCTIC WATERS:

A Symposium on the Ecology of Pelagic Fish Species in Arctic Waters, planned by the International Council for the Exploration of the Sea (ICES), is scheduled to be held just prior to the Statutory Meeting of ICES in Copenhagen, Denmark, in the fall of 1966. The Symposium is to be held in accordance with recommendations made at the last two ICES meetings.

The Symposium is intended to mainly cover a number of species which, due to their only minor direct importance to the fishery and also to the their living partly outside the range of the commercial fisheries, have been somewhat neglected in the research work. However, most of those species play, due to their great quantities, a considerable role as links in food chains and a few of them have become important to industrial fisheries.

The Symposium is planned to be limited to pelagic or semipelagic fish which inhabit or reach into the Arctic or sub-Arctic regions of the North Atlantic. Examples of such species are: Mallotus, Argentina, Osmerus (and possibly other salmonids); smaller gadoids as G. saida, G. esmarkii, G. ogac, G. navaga, G. poutassou; Ammodytes. Species of the herring, tuna, mackerel, and ocean perch (redfish) groups do not fall within the scope of the Symposium.

Although the Symposium is formally limited to the Arctic region, the ecology of those species in areas bordering the Arctic can also be included when necessary to ensure an adequate treatment of the subjects.

The Symposium is to be limited to include three subjects:

(1) The species as links in food chains;

(2) The species as basis for the fisheries; and

(3) The distribution and migration of the species, and their effects upon the availability of commercial fishes.

Participation in the Symposium is not only open to the ICES member countries, but also to others and invitations to participate are to be extended to Canada and the United States.

The deadline for acceptance of contributions by the ICES Secretariat is fixed for May 1, 1966, in order to make possible an advance distribution of papers to participants. To facilitate the prearrangement of the symposium, it is requested that the ICES Secretariat, where possible, be given notice of contributions (authors' names and titles) at an earlier date than May 1, 1966. (Regional Fisheries Attache for Europe, United States Embassy, Copenhagen, November 11, 1964.)

Note: See Commercial Fisheries Review, November 1964 p. 68

CONVENTION ON FISHING AND CONSERVATION OF LIVING RESOURCES OF THE HIGH SEAS

RATIFIED BY UGANDA:

Uganda deposited its ratification, on September 14, 1964, to the International Convention on Fishing and Conservation of Living Resources of the High Seas. This brings to 17 the number of nations which have deposited accession to the Convention. A total of 22 ratifications is needed before the Convention enters into force.

On the same date, Uganda also acceded to the Convention on the High Seas, the Convention on the Continental Shelf, and the Convention on the Territorial Sea and Contiguous Zone. Those Conventions entered into force on September 30, 1962, June 10, 1964, and September 10, 1964, respectively.

Note: See Commercial Fisheries Review, November 1964 p. 70; October 1964 p. 49.

ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT

SANITARY REGULATIONS FOR CANNED FISH DRAFTED AT MEETING OF EXPERTS:

A meeting of experts on sanitary regulations and quality standards for canned fishery products was held by the Fisheries Committee of the Organization for Economic Cooperation and Development (OECD) at Paris, France, November 30-December 3, 1964.

The agenda included the following: (1) Drafting quality standards for (a) canned brisling, brisling sardines, and sprats; (b) canned smoked or unsmoked sild packed from young herring (Clupea harengus) as "sild-sardines" in oil, tomato sauce, or other packing media; (c) canned herring in tomato sauce, brine, or edible oil; (d) canned sardine in tomato sauce or oil; (e) other canned herring. (2) Drafting a Code of Practice.

International (Contd.):

The drafts were discussed and finalized by the experts attending the meeting. The final drafts are to be submitted to Member Countries and to the OECD Committee for Fisheries.

The North American consultant on this project, selected by both the United States and Canada, was Reginald Bolton of the Canadian Fisheries Inspection Service. (Regional Fisheries Attache for Europe, United States Embassy, Copenhagen, November 10, 1964.)

UNITED NATIONS SPECIAL FUND

FISHERIES DEVELOPMENT PROJECTS:

Six United Nations Special Fund projects to aid fisheries are now in operation. Those projects are located in Peru (Marine Resources Research Institute), Ecuador (National Fisheries Institute), India (Central Institute of Fisheries Education), Nigeria (Fisheries Survey in the Western Region), Rhodesia (Lake Kariba Fisheries Institute), and Chile (Fisheries Development Institute).

Other fishery projects for individual countries were approved by the Special Fund in 1964 with the Food and Agriculture Organization (FAO) as the executing agency. Those are in Korea (Deep Sea Fishing Training Center), the Philippines (Deep Sea Fishing Development Project), and Aden (Gulf of Aden Fisheries Survey and Training Project). Preliminary plans for those projects have been prepared.

A regional project for fisheries development in the Caribbean area has also been approved by the Special Fund with FAO as the executing agency. A plan of operation for the project has been prepared and discussed with the participating countries.

Other fishery projects being considered by the Special Fund concern Ceylon, Pakistan, Argentina, Ghana, Central Africa (regional), and East Africa (regional). The proposed projects are mainly concerned with marine fisheries, although the East African regional project involves inland fisheries. (Information Bulletin of General Fisheries Council for the Mediterranean, July 1964.)

Note: See Commercial Fisheries Review, Oct. 1964 p. 30; Nov. 1963 p. 58; Jan. 1963 p. 108; Sept. 1960 p. 50.

WHALING

JAPANESE VIEWS ON ANTARCTIC WHALING DEVELOPMENTS:

The following are Japanese press comments on Antarctic whaling developments and their possible effect on the 1964/65 season.

Norway and the Soviet Union held a meeting in Oslo, Norway, on or about October 19, 1964, to discuss the catch quota for the 19th Antarctic Whaling Expedition, reported the Japanese Government on October 31. Japan was not represented at that meeting. At the meeting of the two nations, Norway apparently agreed to an increase in the Soviet Union's whale catch quota, from 1,600 blue-whale units (representing 20 percent of the international whale catch quota) to a total of 2,000 units. This action not only increases the overall catch quota agreed to among the whaling countries for the 19th Expedition (1964/65 season), from 8,000 units to 8,400 units, but also upsets the international share agreement concluded among member countries.

The Soviet Union was expected to declare an increased catch quota of 2,000 units for the 1964/65 season, but Japan plans to harvest only 4,160 units, the amount allocated to her by agreement with other whaling nations. In a statement made to the press on October 22 concerning his objection to attending the meeting proposed by Norway, the President of the Japan Whaling Association declared that the Japanese industry is not excessively concerned about Soviet intentions. He stated that "even assuming that Norway had requested a meeting since she was afraid that the Soviet Union might increase her catch, the Japanese industry is not that concerned over such a development since it is the opinion of the whale scientists that the whale catch for the coming season will not exceed 8,500 units, even if additional effort should be employed." He added that Japan would operate within her agreed quota.

On October 23, Japanese Government sources revealed that on September 30, Japan had filed an objection with the International Whaling Commission's adoption (at the June 1964 Annual Meeting) of an amendment to the Whaling Convention which would entirely prohibit the catching of blue whale stocks in the Antarctic Ocean. The Convention has prohibited the harvesting of blue whales due to the serious decline of that stock observed in recent years, but permitted limited whaling

International (Contd.):

for pygmy blue whales within the area bounded by 0°-80° E. longitude and 40°-55° S. latitude. The amendment now nullifies that provision and completely restricts all blue whaling operations.

Japan contends that pygmy blue whales have shown no decline at all and sees no reason why the harvesting of that species should be prohibited. Citing the findings of the Commission's Scientific Committee that the pygmy blues could be taken for the next three years at the rate of about 400 units a year without jeopardizing that stock, Japan suggested the possibility of selective catching of that species within the area 30°-80° E. longitude and 40°-55° S. latitude. However, that proposal was rejected by the Commission. (Nihon Suisan Shimbun, November 2; Suisan Keizai Shimbun, October 23 & 24, 1964.)

According to the Japanese periodical Nihon Suisan Shimbun, the Government of Norway, which in response to the desire of the Soviet Union had proposed a meeting of the Antarctic pelagic whaling countries to seek adjustments in the catch quota established for the 19th Antarctic Whaling Expedition, has abandoned her efforts to convene that meeting. The meeting reportedly was cancelled due to Japan's refusal to take part in it, but the periodical claims that the aim of that meeting was to abolish the existing quota and to legally grant the Soviet Union a quota of 2,000 blue-whale units (increase of 400 units), so it was only natural for Japan to refuse to participate in that meeting.

The periodical goes on to state: "The fact that the proposed meeting failed to materialize means the end of the 8,000-unit catch quota informally adopted by the whaling nations for the coming whaling season. Thus, from the standpoint of the International Whaling Commission, the interpretation can be made that the existing international catch share of 52 percent for Japan, 28 percent for Norway, and 20 percent for the Soviet Union is no longer valid. For that reason, while Japan's persistent refusal to attend that meeting was unavoidable, it is conceivable that Japan's attitude may have placed her in a very unfavorable position internationally... .

"The 8,000-unit catch quota agreed to by the whaling countries, despite strong opposition from the Commission's nonwhaling countries, will again be slightly increased, and it can already be anticipated that the Commission, at next year's annual meeting, will criticize the attitude of the whaling countries, particularly Japan, as a result of the Soviet strategy. There is also a strong possibility that the Commission will seek to revise the international quota, since the three whaling countries have declared for the 19th Expedition catch targets not based on the international quota. Now that the whaling fleets have departed for the fishing grounds, the Japanese Government and industry must unite and develop countermeasures to cope with these problems." (Nihon Suisan Shimbun, October 30, 1964.)

Note: See Commercial Fisheries Review, September 1964 p. 54.

Australia

EXPORTS AND PRODUCTION OF SPINY LOBSTERS, AND TRENDS, FISCAL YEAR 1963/64:

Australia's exports of spiny lobster (tails, whole, cooked) in fiscal year 1963/64 (ended June 30, 1964) amounted to 10.7 million pounds with an estimated value of US$13.5 million. The United States as the principal importer of Australian lobster tails took about 80 percent of those exports; France was in second place with about 16 percent.

While exports to the United States were down slightly from the previous year, those to France doubled--from about 865,000 pounds in 1962/63 to 1.7 million pounds in 1963/64. Exports to France were made up of 700,000

Table 1 - Australia's Exports of Spiny Lobsters--Tails and Cooked Whole, 1962/63-1963/64

Country	1/ 1963/64		1962/63	
	Tails	Whole	Tails	Whole
	(1,000 Lbs.)			
United States	8,290	216	8,748	801
France	750	951	123	742
Canada	272	-	87	-
South Africa	41	1	2	-
Singapore	28	67	11	77
Netherlands	4	-	8	-
Belgium-Luxembourg	2	17	-	6
Japan	2	11	-	-
German Federal Republic	-	13	-	10
Greece	4	4	-	1
Italy	-	29	3	18
Arabian States	7	-	7	1
New Caledonia	5	4	8	4
Other	11	13	41	23
Total	9,416	1,326	9,002	1,380

1/Subject to revision.

Australia (Contd.):

pounds of tails and 1 million pounds of whole lobster, with a total value of $1.6 million.

The average price per pound for spiny lobster exported to all countries during the period was about $1.30 for tails and about 73 cents for whole lobster. Exports to the United States during the period averaged about $1.35 a pound for tails.

Five years ago the United States took about 90 percent by weight of the total Australian spiny lobster exports. But the trend in recent years has been toward greater market diversification. While the United States takes the main portion of the exports, Australia has increased its spiny lobster exports to France, Canada, and other countries. Although high prices and less dependence on the United States has strengthened the market for spiny lobster, indications are that Australian production may not keep pace with the demand.

Australian spiny lobster production in 1963/64 was estimated to be 30.7 million pounds (live weight), a decline of about 2 percent from the previous year. The most productive state was Western Australia, which accounted for about 21.5 million pounds or 70 percent of the total production.

A new trend in spiny lobster grade patterns is indicated in Western Australia. Midget lobster which accounted for 18 percent of the tails exported in 1962/63 now account for 24 percent. On the other hand, medium tails which are popular in the United States fell from 28 to 25 percent, while large and jumbo sizes combined dropped from 21 to 18 percent. Jumbo tails which formerly brought lower prices are now selling at close to the top of the market. (Australian Fisheries Newsletter, October 1964.)

Note: See Commercial Fisheries Review, December 1963 p. 54

Table 2 - Australia's Exports of Spiny Lobsters by States, 1960/61-1963/64

	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Total
	(1,000 Lbs.)						
1963/64: Tails	63	481	32	743	7,834	263	9,416
Whole[1]	17	271	17	180	813	28	1,326
1962/63: Tails	7	529	-	573	7,690	203	9,002
Whole	15	348	-	44	797	176	1,380
1961/62: Tails	115	855	42	524	7,947	392	9,875
Whole	8	64	9	-	419	13	513
1960/61: Tails	100	563	-	186	5,047	127	6,023
Whole	208	353	-	6	1,017	199	1,783

1/Estimated.

Table 3 - Australia's Spiny Lobster Production, 1957/58-1963/64

	New South Wales	Victoria[1]	Queensland	South Australia	Western Australia	Tasmania[1]	Total
	(1,000 Lbs.)						
1963/64[2]	400	940	10	4,050	21,500	3,750	30,650
1962/63	491	1,080	31	4,650	[3]21,380	3,761	31,393
1961/62	384	1,138	58	4,025	[3]19,772	3,964	29,341
1960/61	467	1,266	41	3,721	18,019	3,971	27,485
1959/60	492	830	40	3,500	19,545	3,601	28,008
1958/59	461	823	25	4,250	17,517	3,226	26,302
1957/58	525	636	23	4,460	13,327	2,993	21,964

1/Catch by Victorian fishermen in Tasmanian waters has been included in Tasmania.
2/Estimated.
3/Partly estimated.
Source: 1957-58 to 1962-63, Commonwealth Statistician; 1963-64, State Fisheries.

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ARTIFICIAL CULTIVATION OF SPINY LOBSTER TO BE TRIED:

An attempt to breed and artificially cultivate spiny lobster in Western Australia is being considered by private enterprise. A proposal has been submitted to the Western Australian Department of Fisheries to build a fish farm on the coast. It involves the excavation of a pool with stone retaining walls which will contain ledges and caves at various depths for spiny lobster. It is planned to introduce other marine life and to supply sea water through a pipe by gravity feed.

Fisheries Department research officers consider it will be difficult to induce spiny lob-

Australia (Contd.):

ster to spawn in an artificial pond, but believe that the young ones may survive and grow if artificially fed.

Shrimp farming, using artificial propagation methods, has been successfully developed in Japan, but it has taken many years of research to develop the techniques. (Australian Fisheries Newsletter, September 1964.)

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NORTH QUEENSLAND SHRIMP BEDS PRODUCTIVE:

Shrimp beds in the Burdekin Estuary area of North Queensland, Australia, yielded good catches of shrimp in September 1964. Six vessels were working the area and the shrimp were marketed from Mackay to Cairns. Daily catches of more than 3,000 pounds were landed at Townsville. The North Queensland Fish Marketing Research Authority has been asking for local surveys by local vessels in an endeavor to discover more shrimp beds in North Queensland. (Australian Fisheries Newsletter, September 1964.)

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SHRIMP RESOURCES IN NORTHERN WATERS SURVEYED:

A two-year survey of the shrimp fishery potential of the Gulf of Carpentaria on Australia's north coast was approved in 1962 for expenditures of up to Ł25,000 (US$56,000) from Australia's Fisheries Development Trust Account. The survey was to be conducted jointly with the state government of Queensland.

A survey vessel has been operating in the Gulf of Carpentaria for nearly 12 months and a considerable amount of data on the occurrence of various species of shrimp has been collected. The data have given several interesting leads as to the best method of continuing efforts in the Gulf to locate commercial quantities of the various shrimp species.

The Australian commercial fishing company which has established shore-processing facilities in the area has been working in close cooperation with the survey. Commercial catches have been made on a scale which would, if sustainable, indicate a major shrimp fishery. But the very great area to be covered and the limitations in using only one vessel have not made a definitive assessment of the shrimp resource possible.

The supervising committee, in making a review on progress of the survey, concluded that although the survey vessel has caught shrimp in commercial quantities on only a few occasions, encouraging evidence of abundance of banana and tiger shrimp has been obtained. The knowledge which has now been acquired from the survey indicates commercial success in 1965. (Australian Fisheries Newsletter, September 1964.)

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FOREIGN TRADE IN FISHERY PRODUCTS, FISCAL YEAR 1963/64:

Exports: The value of Australian exports of fishery products in fiscal year 1963/64 (July 1963-June 1964) rose to a record AŁ8,266,000 (US$18,350,520), according to preliminary data. That was an increase of 12 percent from the previous fiscal year. The main reasons for the increase were improved prices for Australian spiny lobster tails in the United States, expansion of the scallop market in France, and an increase in frozen tuna exports to the United States.

Shipments to the United States accounted for 64 percent of total Australian exports of fishery products in 1963/64, shipments to France and Japan each accounted for 11 percent, and shipments to the United Kingdom accounted for 6 percent.

The increase in United States spiny lobster prices was largely the result of a significant fall in United States spiny lobster inventories. On June 30, 1964, those were estimated at 3.5 million pounds, which was 47 percent lower than in June 1963. (Editor's Note: United States cold-storage holdings of spiny lobsters on September 30, 1964, were about 2.6 million pounds as compared with 5.1 million pounds on September 30, 1963. In the first 8 months of 1964, United States imports of frozen spiny lobsters included 7.6 million pounds from Australia, 8.6 million pounds from the South Africa Republic, 1.9 million pounds from New Zealand, 1.8 million pounds from Brazil, and about 5.3 million pounds from other countries. During January-August 1963, United States imports of spiny lobster tails included 8.2 million pounds from Australia, 7.0 million pounds from the South Africa Republic, 2.2 million pounds from New Zealand, 2.7 million

Australia (Contd.):

pounds from Brazil, and about 4.1 million pounds from other countries.)

Australian shrimp exports in 1963/64 went to Japan, the United States, and South Africa.

It is estimated that more than 750,000 pounds of scallops valued at about AŁ185,000 ($410,700) were exported from Australia in 1963/64, of which 655,000 pounds went to France, and the balance to Belgium, the United Kingdom, and New Caledonia.

Imports: The value of Australian imports of fishery products in fiscal year 1963/64 was 24 percent above that in the previous fiscal year. The largest increase was in imports of fresh and frozen fish, the bulk of which was South African hake, and British bream and cod packed in 1-pound and 5-pound cartons.

Australian Imports of Fishery Products, Fiscal Year 1963/64

Item	Value			
	1963/64		1962/63	
	AŁ 1,000	US$1,000	AŁ1,000	US$1,000
Fresh and frozen fishery products.	5,187	11,515	3,822	8,485
Canned fishery products	4,683	10,396	4,039	8,967
Other fishery products	1,221	2,711	1,070	2,375
Total	11,091	24,622	8,931	19,827

In fiscal year 1963/64, Australian fishery imports exceeded fishery exports in value by 34 percent. (Australian Fisheries Newsletter, September 1964.)

Notes: (1) See Commercial Fisheries Review, Oct. 1964 p. 51.
(2) Australian pound 1.00 equals US$2.20.

Canada

HERRING FISHING IN BRITISH COLUMBIA HALTED BY PRICE DISPUTE:

British Columbia herring fishing was halted in late October 1964 by a price dispute. The tie-up came a week after the expiration of the 1963/64 Herring Price Agreement between British Columbia fishermen and processors. Before the tie-up began, processors were reported to have offered fishermen C$14 (about US$13) per short ton for reduction herring, or C$1.60 (US$1.48) more than the C$12.40 (US$11.48) paid for British Columbia herring going into reduction during the 1963/64 season. The processors also offered to contribute to a medical plan for fishermen during the coming season. (Editor's Note: Ex-vessel prices for herring in British Columbia are not comparable to prices in certain other countries, because British Columbia processors furnish much of the equipment used in the fishery.)

Note: US$1.00 equals Canadian $1.08.

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FISHERIES MINISTER REPORTS TO PARLIAMENT ON FISHING INDUSTRY PROGRESS IN 1964:

Canada's commercial fishery in 1964 was generally satisfactory, according to the annual report given by the Canadian Minister of Fisheries to Parliament, September 23, 1964. The spring salmon fishery in British Columbia yielded 4.9 million pounds in the first 6 months of 1964 as compared with 3.6 million pounds for the same period in 1963. For the first 7 months in 1964, landings of all species by Canada's commercial fishermen on both coasts totaled 1.2 billion pounds--30 million pounds more than in the same 7 months a year earlier. Despite the overall increase, cod landings from Newfoundland's trap fishery were below 1963 and contributed to a 48-million-pound decline in Canadian landings of that species.

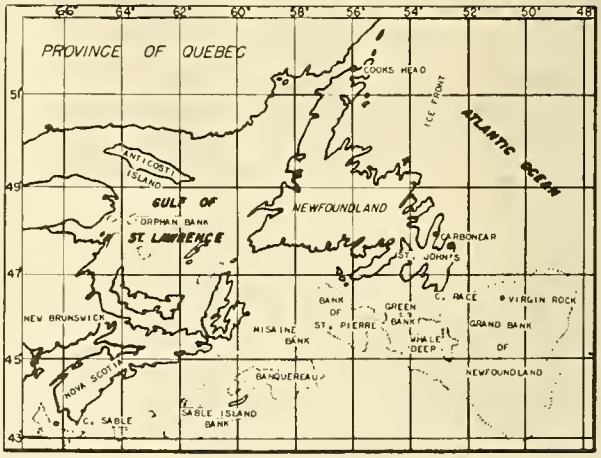

Fig. 1 - Canadian fishermen are close to rich fishing banks off the Atlantic Coast.

In his annual report to Parliament, the Minister of Fisheries said, in part:

"The value of the commercial catch is larger so far this year than the increase in landings would suggest. The increase in value to the end of July was about 20 percent against 2 percent increase in the volume of landings. This is accounted for principally by a high-

Canada (Contd.):

er proportion of the more valuable species in the total catch. In British Columbia, salmon landings are up by 34 million pounds, and in the Atlantic provinces there have been significant increases in the landings of haddock, small flat fish, swordfish, and scallops....

"This expansion in output at the primary level of the industry occurred without any softening of dockside prices. In fact, in some cases the price level moved up over the record level set a year ago....

Fig. 2 - "Seining the weir" (concentrating the fish into a mass by gradually decreasing the net space) in a 60-foot sardine weir off the Atlantic Coast.

"In the Maritime Provinces the expansion in production and quality of swordfish and tuna, the last just a two-year-old industry, continues.... The United States is the predominant market for these special species. This year the value of scallop landings is up by C$900,000 and swordfish by $600,000 over the last season....

"The halibut catch, however, has been disappointing, especially from area 2, but prices have firmed up considerably from last year....

"The value of exports to the end of June indicates a continuing strong demand for fishery products from this country. For all products, this figure for the six months period was C$88 million, compared with $72 million to the end of June 1963. The United States continues to be the largest customer in this field and Canadian exporters sold $58 million worth out of the $88 million total to markets in the United States.

"The demand for groundfish products continues without abatement....

"The strong demand for Canadian fishery products, and especially that associated with the growing population on this continent, has been accompanied by firm or rising prices. This situation has been apparent for several years.... The Atlantic fleet now includes 92 trawlers, most of which are modern and efficient. Five years ago this fleet comprised 53 vessels. This is an increase of 80 percent, and most of the 53 were used ships which had been purchased from the United Kingdom and the United States. The scallop fleet now contains about 35 vessels over 75 feet in length, capable of exploiting distant beds and landing scallops of high quality. Five years ago there were only 9 scallop vessels of this size on the Atlantic coast. Fishermen, alone or in partnerships, are acquiring vessels in the 45- to 65-foot class which fish near and middle distance waters. They are equipped with modern fish-location and catching gear, and their owners are actively experimenting with new types of gear and new methods of fishing. Nearly 500 of these vessels have been purchased by fishermen with financial assistance provided by the Department of Fisheries in recent years.

"Significant advances have been made by industry in providing facilities to increase their processing capacity and to expand the variety of fish and shellfish products available to an increasingly quality conscious public.... Complementary to the development program for improved product quality at the processing level has been the Department's work in the fields of fish-boat inspection and dockside grading. As an outcome of the Federal-provincial conference on fisheries development, which pointed to the need for improvement in the quality of fish as landed, more emphasis has been placed on these aspects of inspection. Regulations are being developed for adequate sanitation and handling methods on fishing boats. Educational material is being prepared for the assistance of fishermen in handling and caring for their catch, and also for those handling fish at the retail level.

Fig. 3 - Irish moss is harvested on parts of Canada's Atlantic Coast. Raked up from the sea, the seaweed is spread to dry on flakes (wooden racks).

"The Department's laboratories are responsible for the inspection of domestic and imported canned fish; experimental work on the development of new and improved standards for canned and other types of fish; shellfish toxicity control programs; the bacteriological control of fresh and frozen shellfish plants and the purity of plant water supplies. These services are provided by permanent or mobile laboratories as the need dictates..."

National Fisheries Development Program: In speaking of Canada's national fisheries development program, the Minister said, "I have already mentioned in this house our national fisheries development program, the basis of which was set up at a Federal-provincial conference on fisheries development which I convened in Ottawa last January (1964). I explained, too, that this

Canada (Contd.):

was also a forum for the views of industry as well as of Government, since briefs were received at that time from the Fisheries Council of Canada and from fishermen's representatives from various areas.

"The progress made as a result of this conference is quite heartening, and I think this is the proper time and place to report on it. A number of projects are now well under way as cooperative efforts between Federal and provincial administrations. These include the following:

"1. The development and demonstration of trawls suitable for rough bottom, so that our Canadian fishermen can exploit grounds now being actively fished by foreign vessels.

"2. The modification of small boats for inshore dragging and introduction of Japanese-type mechanical squid jigging equipment--this is in the Newfoundland area.

"3. Demonstration of the construction and operation of the western or Pacific trawl in Nova Scotia and New Brunswick waters.

"8. Experimental and development work in Quebec on fish-finding gear towed by helicopter.

"9. The development and introduction of improved lobster processing line techniques in Quebec plants.

"10. Work in collaboration with ARDA on a project to improve the inshore fishery in northeastern Newfoundland.

"During the conference it became obvious that there was a need for regional Federal-provincial committees similar in concept to the Federal-provincial Atlantic fisheries committee which was established in 1958 to coordinate programs for fisheries development, and the Federal-provincial committee for Ontario fisheries. Consequently we now have a Federal-provincial committee for British Columbia fisheries and a Federal-provincial prairie fisheries committee. All these Federal-provincial regional committees are of inestimable value in that they constitute formal consultative bodies which can discuss and deal with questions of common interest such as marketing, research and fisheries management generally. A sport fishery advisory committee has also been established in British Columbia. . . .

"Restriction of entry into the lobster fishery has been considered at regional Federal-provincial meetings; so has the subject of limitation of entry into the Pacific

Fig. 4 - New fish-processing plant in Lunenburg, Nova Scotia. Designed to efficiently handle fish by a system of conveyor belts from the vessel unloading pier to the final freezing of the packaged processed fish products. Vessel unloading facilities are completely enclosed.

"4. The charter of a Norwegian whaling vessel, with her crew, to learn and to demonstrate the possibilities of reviving the whaling industry on the Atlantic coast.

"5. The improvement of trawling operations for groundfish off the Pacific coast.

"6. A survey is being made of the Irish moss resources in New Brunswick and Prince Edward Island and a few days ago I made the announcement that a site had been selected on Prince Edward Island for the construction, with assistance from the Atlantic development board, of an Irish moss drying plant.

"7. The exploration of a new scallop bed off Shippegan gully.

salmon fisheries, and there have been discussions on fish farming, in particular, with respect to commercial trout farms. A good deal of background material on this subject has been prepared and these matters are under active consideration.

"The control of pollution of our waters remains a subject of vital interest and much information has been collected. The fisheries research board has been in consultation with the national research council concerning the establishment of an intergovernmental committe on pollution to ensure the availability of complete information. It is hoped that work on salt-water pollution in the Atlantic region can be started and that the work already carried out on the Pacific coast can be strengthened.

Canada (Contd.):

"Discussions have taken place with the Department of Labor and with provincial authorities on vocational training and education for fishermen, and my department is creating an educational unit to coordinate activities in this connection.

"Then again, as a result of recommendations made during the Federal-provincial conference, a fisheries-related approach to improvements in harbor works has been discussed with the Department of Public Works and the Atlantic development board. Discussions have also taken place with the Department of Finance concerning improvements to the Fisheries Improvement Loans Act. The provincial authorities and the industry are being asked for their views concerning credit facilities for fishermen and possible inadequacies in the existing legislation."

Other Federal Government Fisheries Projects: In reporting to the Parliament on other Canadian Federal Government fisheries projects, the Minister said, "In addition to the programs already mentioned, many other industrial development projects are under way. Powered gill-net haulers are being introduced, synthetic cod gill nets are being tested in areas where they have not been used, and we are experimenting with synthetic materials for cod trap construction. We are also working on a prototype of a mechanized gill-net boat capable of multipurpose fishing operations, and we have introduced porbeagle shark fishing gear and techniques in the Atlantic provinces.

"Modern methods of seining herring in western and southern Newfoundland also are being demonstrated to ascertain the commercial potential of such operations in those areas. New techniques in salt-fish drying, using high-speed equipment developed in the department, are being demonstrated on a commercial scale for the benefit of industry, and we are producing, on a pilot plant basis, commercially acceptable instant fish-potato flakes.

Fig. 5 - A Canadian West Coast purse-seiner sailing out to seek the schools of salmon.

"We are working on a design of a deep-sea stern ramp trawler to meet the specific Canadian requirements for groundfish trawling operations and are experimenting with an electrical trawl.

"In Nova Scotia we are studying the distribution and abundance of herring, whiting, argentines, and sand launce, which are species of small fish not yet exploited by Canadian fishermen. The object is to develop offshore trawling gear and techniques so that this situation may be remedied. Scottish methods of Danish seining are being tested to increase the efficiency of this technique, and we are hoping to develop a distant-water tuna fishery, using large seine boats.

"A new and promising design for a plastic lobster trap is being tried out on a commercial scale in Prince Edward Island where we also hope to encourage offshore herring seining methods, like those used in Iceland, in order to meet European orders for frozen herring. We are aware of the great potentialities of fishing for pelagic fish in the Gulf of St. Lawrence and we are prepared to meet this challenge. Crab fishing operations are under way in the Northumberland strait, and we are hoping that a crab fishery can be developed around the Magdalen and Anticosti Islands. We anticipate good results from a manually operated hydraulic clam digger developed by the fisheries research board for clam beds in the maritimes.

"In British Columbia one of our aims is to diversify fishing operations off the Pacific coast by the introduction of better trawling operations for groundfish, and we are working on an improved refrigeration system for use in the halibut fishery in distant areas."

Fishing Limits: Referring to the establishment, on July 23, 1964, of a 12-mile fishing zone around the coasts of Canada, the Minister told the House the next step was the establishment of straight base lines from which the 12-mile fishing zone and the territorial limits would be measured. They are now measured from the contour of the coastline.

Eight other countries, the Minister pointed out, have been fishing off Canada's coastline for some time and discussions were being held with those countries to see how their interests might be affected. Those discussions were in their second round as of late September 1964 and the Minister hoped for their early conclusion so that new base lines could be established without delay. (Canadian Fisherman, November 1964.)

Note: See Commercial Fisheries Review, November 1964 p. 79; October 1964 p. S2; March 1964 p. 42, January 1964 p. 44.

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DOME-SHAPED LOBSTER TRAP DESIGNED WITH UNIQUE FEATURES:

A new dome-shaped "igloo" lobster trap made of plastic has been developed by the Markland Works, Ltd., Amherst, Nova Scotia. That firm was set up for the sole purpose of manufacturing and marketing the new trap. A large-scale test of the new trap is scheduled in fishing areas off Prince Edward Island. Preliminary tests in the lobster fishery have already been carried out; tests in the west coast crab fishery of British Columbia have also been conducted.

The new plastic traps are expected to have an effective working life of from 8 to 10 years. In addition, it is claimed that their shape and weighting make them more stable on the sea bottom than other traps.

Canada (Contd.):

The polyethylene plastic material in the new traps will not rot or waterlog and is not attacked by marine borers or other forms of sea life. In the water, it has the same smooth resilient feel as kelp, a natural sea plant on the lobster grounds. Polyethylene used in the traps is pigmented to reduce the danger of sunlight degradation when the traps are stored in the off-season.

Fig. 1 - New plastic "igloo" lobster traps compared with conventional wood-and-twine traps. Here, 32 of the new compact traps are piled in front of the same number of conventional traps. That number of new traps occupies the same space as four conventional traps. White objects are bait boxes for the new traps.

The trap is dome-shaped--hence the name "igloo"--with a vertical entry for the lobster. This design gives the trap greater bottom stability and allows lobsters direct access to the entry from any direction of approach. The entry itself is at the top of the dome and closer to the bait than any other point in the trap.

Fig. 2 - Plastic traps are loaded on lobster fishing vessel at Victoria, P.E.I., Canada. The "igloo" traps snap apart easily for storage, and can be assembled in seconds. They are weighted with a coated iron ring which helps them sit firmly on the bottom.

The entry consists of thin fingers of polyethylene leading into the trap. The fingers are resilient and can easily be spread apart by a lobster attempting to enter. When the lobster is inside, however, the fingers spring back into place closing off the entry. The opening can be spread to nine inches to trap much larger lobsters than present traps. Once the lobster is in the new trap, it stays in. There is no chance for it to spread the fingers from inside and escape. A small exit port is left in the side to allow undersized lobsters to escape.

Fig. 3 - Lobster fisherman assembles an "igloo" trap on the way to the lobster grounds. The traps have a twist-on bait box that can take whole fish bait or mashed or chopped fish waste. The bait box prevents groundfish or crabs from stealing the bait before the trap can attract lobsters.

The "igloo" trap also has a specially designed quick-release bait container, made to hold either whole or mashed bait. The new bait box allows fishermen to use cheap fish trimmings and other low-cost bait. It also prevents fish from eating the bait before it has a chance to attract lobsters.

"Igloo" traps come in four sections which can easily be fitted together. The base section has a mild steel weight ring snapped into it with a tow eye welded to the ring. The steel ring is coated with epoxy plastic to prevent rusting and the tow eye is made of a special salt-water-resistant steel. The bait box snaps into the center of the base and twists on so that it is securely fastened. The dome-shaped body of the trap twists onto the base and is held by mating lugs. The top section with the

Canada (Contd.):

entry port is hinged to the body and closes with two latches.

Each part can be nested separately when transported and a trap can be baited and assembled in seconds. The nesting feature will allow a standard Canadian lobster boat to place 300 to 350 "igloo" traps without returning to port for another load.

Fig. 4 - Lobster fisherman throws an "igloo" trap overside. Weighing 25 pounds, the plastic traps are lighter than conventional traps which can weigh up to 100 pounds when water soaked. The new traps weigh about the same as the wooden traps on the bottom, 19 pounds, because of their lower buoyancy. The iron ring at the base distributes the weight around the circumference of the "igloo" trap giving it stability on the bottom.

"Igloo" traps weigh 20 to 21 pounds on the bottom and 25 pounds in air, compared to 20 to 25 pounds on the bottom and up to 100 pounds in air for conventional traps. The top and bait box of an "igloo" trap open in seconds for baiting. When the lid is open there is ready access to the catch.

Because of their dome shape and ballast arrangement, the new traps settle in an upright position on the seabed. The slight buoyancy of the plastic keeps the top upright as the traps settle. (DuPont of Canada, Ltd., November 1964.)

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EXPERIMENTAL OYSTER HATCHERY OPENED ON PRINCE EDWARD ISLAND:

Canada's first experimental oyster hatchery was officially opened in the summer of 1964 at Ellerslie, P.E.I., on the east coast. The hatchery, operated by the Canadian Federal Department of Fisheries, is designed to spawn oysters at any time during the year and to raise young oyster larvae to the stage where they settle down on the sea bottom as spat. The main purpose of the new facility is to produce spat in sufficient quantity to supply the oyster industry.

Spawning at the new hatchery is regulated by careful control of salinity, temperature, and other conditions. For example, the water in oyster tanks is heated in the winter and, at times, cooled during the summer.

The new hatchery also has an oyster-breeding program designed to improve growth, shape, flavor, and other characteristics of Atlantic oysters. Exotic species of oysters living in locations where commercial oysters cannot survive will also be tested in the hatchery.

While the study and raising of oysters are the main concerns of the hatchery, it will also study related subjects. For instance, oyster scientists are taking a closer look at eel grass, a marine flowering plant which is a serious menace in some oyster-growing areas. Methods for its control are being sought. The effects of pollution on oysters are also under study. Scientists at the hatchery are also seeking methods to control shipworm, a species of shellfish which attacks hulls of wooden vessels and other wooden structures in water.

Speaking at the opening of the new hatchery, the Canadian Federal Minister of Fisheries said there was every reason to give the Canadian oyster industry technical support to help it expand. He recalled the heavy mortalities suffered by Prince Edward Island oyster stocks more than 40 years ago when an epidemic struck the beds. Research scientists took over the problem and were able to use isolated pockets of resistant stocks to bring back the industry to the island.

The Minister also recalled the epidemic which devastated oyster beds in New Brunswick and Nova Scotia within the last decade. Quick action was taken by the Federal Department of Fisheries and more than 10,000 barrels of disease-resistant island oysters were transplanted in the affected areas on the mainland. "In general," he said, "these oysters lived and grew in the new areas, and they produced spat which in most cases was resistant, and the industry is now rebuilding."

The Minister declared that if the industry was to expand, it would have to be mainly through leased fishing areas where beds can be properly seeded and cultivated, and a top quality product harvested. (Canadian Trade News, September 1964.)

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NEW RESEARCH VESSEL "E. E. PRINCE" TO BE BUILT FOR ATLANTIC INVESTIGATIONS:

A contract to build a million-dollar research vessel for Atlantic fisheries investigations has been awarded by the Canadian Federal Department of Fisheries to a shipyard in the St. Catharines, Ontario, area. The contract calls for a 130-foot vessel with a range of 3,000 miles and a cruising speed of 11 knots. The vessel will be equipped for stern trawling and scallop dredging. It will have a 27-foot beam, a draft of $10\frac{3}{4}$ feet and a complement of 21 including scientists and crew.

The new research vessel will be named the E. E. Prince after the late Professor Ernest E. Prince, who was the first chairman of the

Canada (Contd.):

Biological Board of Canada, which later became the Fisheries Research Board.

The E. E. Prince will have an antirolling flume-stabilization system to help steady the vessel while operating at sea; it will also have a bow-thruster installed well below the low-water line to aid slow-speed maneuvering.

The all-welded steel hull of the vessel will be strengthened for navigation in ice, and the deckhouse and wheelhouse amidships will be of aluminum. Propulsion machinery will be amidships. The fish hold and fishing gear will be located on the upper deck aft, which will be wood-sheathed.

Hinged gallows of special design will be installed for lowering and retrieving trawls. Two hydraulic trawl winches, each capable of exerting a pull of 4 tons at 240 feet per minute, will be fitted to operate in synchronization or independently as required. A winch for taking oceanographic samples will also be installed. Navigational aids to be installed include 2 radar sets, gyro compass, automatic pilot, 3 echo-sounders, and radio-navigational systems. The propulsion machinery will consist of a 600-horsepower Diesel engine coupled to a 4-blade controllable-pitch propellor. Electric power will be provided by three Diesel-driven generators. (Canadian Department of Fisheries, November 23, 1964.)

Chile

TUNA EXPORT INDUSTRY PLANNED:

To develop an export tuna industry, Chile is building a modern fish canning and freezing plant at Iquique. The Government-owned plant is expected to process between 25,000 and 30,000 metric tons of tuna, bonito, and sardines annually (mostly for export). The anticipated opening of the new plant has been delayed; it will probably not be in operation before the first quarter of 1965. The new plant, with its 3 automatic canning lines, will be capable of an annual production of 400,000 cases of tuna (48 1/2-pound tins) and 360,000 cases of Spanish sardines (48 1-pound tins). The cold-storage capacity of the new plant will be 100,000 tons of fish; freezing facilities will consist of a blast-freezing room and a brine-freezing installation. The new enterprise also includes a fish meal plant which began operating in June 1964.

The supporting fleet for the new plant will be composed of 8 tuna vessels and 9 anchoveta vessels. The anchoveta fleet is already working. The first vessel of the tuna fleet, the 170-ton Santa Rosa, started fishing in December 1962. (The company has used the cold-storage facilities of another plant to process frozen tuna and bonito from the Santa Rosa for export.) Two 310-ton vessels, acquired from Great Britain, were expected to join the Santa Rosa in late 1964. Five 110-ton purse seiners were ordered from German shipyards for the tuna fleet. Those vessels are scheduled for completion and delivery in late 1964.

Organized by the Production Development Corporation of Chile (CORFO), the new company at Iquique will be Chile's first modern fish canning-freezing plant. Chile tightened its control of fishing permits to foreign tuna vessels, with the idea of maintaining adequate resources for its own tuna industry. The Government is also concerned over the proposed yellowfin tuna conservation program of the Inter-American Tropical Tuna Commission.

The new Government-owned cannery at Iquique will bring mechanization to the Chilean fish canning industry. The four relatively small canneries now in operation in north Chile produce for the domestic market. None is fully automatic and only one has refrigeration facilities. However, those plants produce all the tuna and bonito and about 40 percent of the sardine and salmon-type fish canned in Chile. (United States Embassy, Santiago, October 29, 1964.)

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FISHERIES TRENDS, THIRD QUARTER 1964:

Landings of anchoveta from Chile's northern waters were rather light during July-September 1964 (usually considered an off-season period), but were considerably improved compared with the same period in 1963 when the anchoveta virtually disappeared from those waters. But the fish caught during the 1964 season were thin and their oil content very low. Although fish supplies were low, most industrial products plants continued to operate during the period.

Some of the larger vessels of the anchoveta fleet fished off Mejillones, a fishing area of the Antofagasta canneries. This incursion into that area by those larger anchoveta fishing vessels was protested on the grounds that some of the commercial species taken by them were too valuable to use for fish meal.

Chile's anchoveta landings in the first half of 1964 exceeded total landings of that species in 1963. By the end of 1964, the fish reduction industry of northern Chile will have installed a production capacity nearing 900 metric tons of raw fish per hour. The 1964 export value of fish meal and fish oil was expected to amount to some US$30 million.

The frozen shrimp and langostino industry of central Chile is expanding its processing facilities as well as modernizing them. Within the next year there should be a substantial increase in exports of frozen shrimp and langostino (baby rock lobster-type meat). Two new plants are under construction and three existing plants are installing new processing lines. The plants have modernized

Chile (Contd.):

their facilities and have better handling procedures in order to improve and increase production. (United States Embassy, Santiago, October 21, 1964.)

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FISH MEAL AND OIL PRODUCTION ESTIMATE FOR 1964 AND OUTLOOK FOR 1965:

The dynamic development of the fish reduction industry in northern Chile over the last few years has placed Chile among the major fishing nations of the world. The reduction industry in northern Chile represents a capital investment of around US$75 million. Chilean output could reach 455,000 metric tons of fish meal and 60,000 tons of fish oil in 1965.

The Chilean industry has been going through some readjustment. The explosive expansion of late 1962 and early

Fish meal being put in bags at a plant in San Antonio, Chile.

1963 was arrested by an almost complete disappearance of anchoveta from Chilean coastal waters from June through November 1963. Speculative and inexperienced capital was frightened out of the industry. The more sober pace of present growth offers greater assurance of a strong Chilean reduction industry.

Plant Capacity: As of July 1964, a total of 24 Chilean reduction plants were in operation in the northern Province of Tarapaca with a combined capacity of some 680 metric tons of raw material per hour. Twelve of those plants went into production during the first half of 1964. Under construction in Tarapaca in mid-1964 were 12 new plants and 7 new lines in existing plants. The facilities being built should boost the capacity of the Chilean reduction industry to about 1,200 tons of raw material per hour by 1965.

Production: In 1963, northern Chile produced 93,000 metric tons of fish meal and 12,300 tons of fish oil which represented 86 percent and 98 percent, respectively, of the total production of the country. The entire output of northern Chile was sold on the world market. Production in the first 6 months of 1964 amounted to 110,000 tons of fish meal and 13,600 tons of fish oil. Assuming 80 days of normal operations for the last half of 1964, production for the year should total some 255,000 tons of fish meal and 35,000 tons of fish oil. At prevailing prices, that production would have a total export value of $30 million to $35 million. In 1965, production could reach 455,000 tons of meal and 60,000 tons of oil. At prevailing prices, its value on the world market would amount to some $55 million to $60 million.

Fishing Fleet: The supporting anchoveta fleet of north Chile numbered 205 vessels as of July 15, 1964, an increase of about 100 vessels within the year. With few exceptions the fleet is composed of modern steel purse seiners having a hold capacity of 100 to 170 tons and equipped with echo-sounder, radiotelephone, power block, anchor winch, and a Diesel-powered skiff. Many of the larger craft have fish pumps for emptying the nets.

The fleet is supported by a group of spotter planes which effectively cover the 200 miles of coastline from Arica to Iquique. Several planes are being used to direct net setting and hauling.

Anchoveta Catch: The northern fleet of Chile increased its catch of anchoveta (Engraulis ringen), the commercial fish of the reduction industry, from 438,000 metric tons in 1962 to 538,000 tons in 1963 (in spite of an almost complete disappearance of anchoveta from Chilean coastal waters for approximately 6 months in 1963). Landings in the first 6 months of 1964 reached 608,000 tons, a 55 percent increase over the catch during the same period of 1963. However, to support normal operations of the expanded reduction industry, the fleet must bring its total take for 1964 to 1,450,000 tons of fish. Installed plant capacity in 1965 will require between 2.3 million and 2.5 million tons of fish. If anchoveta are within reach, the present fleet is considered capable of supporting the normal production of existing plants. In 1965, a fleet of 250 to 275 vessels will be required to adequately supply the installed capacity.

Costs: Production costs have increased over 1963, but (with the very favorable world market for both fish meal and fish oil) earnings appear to be substantially better. In the Arica and Iquique zones, the cost of producing fish meal is around $80 to $90 per ton. The landed cost of the anchoveta continues around 10 percent of the f.o.b. value of fish meal. The October 1964 price of fish meal was $125 f.o.b. Chilean ports.

Exports: The fish reduction industry of north Chile has been developed for the export market. (Domestic requirements of some 23,000 tons of fish meal are supplied by the higher-cost producers of south central Chile.) Chile's exports of fish meal in 1963 totaled 86,800 tons valued at $9.3 million as compared with fish meal exports of 41,500 tons valued at $3.5 million in 1961. Fish oil exports in 1963 totaled 11,800 tons valued at $1.3 million bringing exchange earnings of the fish reduction industry to $10.6 million. Plants outside north Chile contributed only 3 percent of the total export value.

Shipments of fish meal from Chile in the first 6 months of 1964 reached 77,600 tons with a value of $8.2 million. A substantial amount of oil was awaiting shipment as of July 1964. If the supply of fish was adequate to maintain normal operations, exports in 1964 could reach 200,000 tons of meal and 30,000 tons of oil with a total value of $25-30 million.

In 1965, the fish reduction industry of north Chile will have the plant capacity to support an export trade of some 400,000 tons of meal and 60,000 of oil, which at present prices would yield an exchange earning of approximately $55 million.

The United States was Chile's best market for fish meal in 1963, but was replaced by West Germany during the first half of 1964. The Netherlands, Belgium, and Great Britain are the other principal markets. Venezuela was a strong purchaser in 1963. France and Italy increased their purchases substantially during the first 6 months of 1964. All fish meal is sold f.o.b. Chilean ports. The export price of fish meal averaged $107 a ton in 1963; the price in October 1964 was around $125. The trade expected prices to hold steady for the balance of 1964. Shipment is made in both jute and paper bags. Eventually some meal will be shipped in bulk.

The Netherlands continues to be Chile's principal market for fish oil (over 80 percent of the total exports of fish oil went to that market in 1963). The export price of fish oil averaged $110 a ton in 1963, but in October 1964 ranged between $150 to $175 a ton. All shipments are made in bulk. (United States Embassy Santiago, October 29, 1964.)

Ghana

FOREIGN-BUILT TRAWLERS RECEIVED:

Delivery of the first of 7 large stern trawlers ordered from Norway by Ghana was formally accepted recently by the Board chairman of the government-controlled Ghana Fishing Corporation. Delivery ceremony for the 231-foot trawler Shama was at a West Norwy shipyard.

The vessel has a deep-freeze capacity of 24 tons of fish a day, and 35,000 cubic feet of refrigerated storage space. It is Diesel-powered by engines generating 1,960 b. hp., coupled to reversible propellers; is capable of 14.5 knots; and can carry fuel for 60 days. Four of the other trawlers on order at Norwegian shipyards have already been launched, with 2 more vessels to be built.

Meanwhile, a group of 17 Ghanaians has begun intensive training in Oslo to qualify as engineers on the trawlers. The 11-month course, which started the middle of October 1964, includes elementary engineering and apprentice service at Norwegian shipyards. It is a part of a program, as yet to be formally worked out and approved, under which the Norwegian Agency for International Developement (NORAD) will assist in training Ghanian engineers and deck officers for the trawler fleet.

According to present plans for the projected cooperation between Ghana and Norway, NORAD will supply four instructors and special equipment for a maritime school to be established at the port of Tema in Ghana. Government authorities will provide the site, buildings, and some of the equipment, besides carrying part of the operating cost. The school will be jointly run for three years, and then transferred to local authorities in Tema. (News of Norway, November 12, 1964.)

Six stern trawlers are also being built at a shipyard in Wales, Great Britain, for the Ghana Fishing Corporation. These will be fitted with six-cylinder Diesel engines rated at over 2,000 b. hp.

Another new fishing trawler, the Sushion, was delivered to the state-owned Ghana Fishing Corporation in October 1964. The 176-foot trawler (644 gross tons) was built by a Soviet shipyard at Kiev and has a maximum fish-holding capacity of 140 metric tons.

Ghana is in the process of building up a large modern trawler fleet. The state-owned Fishing Corporation now has 8 trawlers, and 12 additional trawlers for the corporation are on order by the government. Ghana also has received the second of a group of 236-foot stern trawlers of 1,850 gross tons ordered from Japan. The order to the Japanese shipyard includes two fish carriers of 1,200 dead weight tons each. Ghana's vessel order to the Japanese shipyard is reported valued at about US$16 million, the largest ever received from an African nation. World Fishing, October 1964, and other published and unpublished sources.)

Note: See Commercial Fisheries Review, December 1964 p. 94, October 1964 p. 57 March 1964 p. 54.

Iceland

EXPORTS OF FISHERY PRODUCTS, JANUARY-AUGUST 1964:

During January-August 1964, there was an increase in exports of salted fish (uncured), frozen fish fillets, cod-liver oil, fish meal, and herring meal as compared with the same period in 1963, according to the Icelandic periodical Hagtidindi, September 1964. Exports of herring on ice, frozen herring, salted herring, herring oil, and ocean perch meal showed a considerable decrease in the first 8 months of 1964.

Icelandic Fishery Exports, January-August 1964 with Comparisons

Product	Jan.-Aug. 1964			Jan.-Aug. 1963		
	Qty.	Value f.o.b.		Qty.	Value f.o.b.	
	Metric Tons	1,000 Kr.	US$ 1,000	Metric Tons	1,000 Kr.	US$ 1,000
Salted fish, dried	728	18,425	427	1,423	28,594	663
Salted fish, uncured	22,662	350,945	8,142	17,492	220,506	5,116
Salted fish fillets	1,001	14,424	335	921	11,498	267
Wings, salted	1,173	14,765	343	1,504	18,484	429
Stockfish	5,821	158,872	3,686	3,802	102,619	2,381
Herring on ice	19	140	3	7,224	23,417	543
Other fish on ice	20,547	118,811	2,756	19,762	101,862	2,363
Herring, frozen	14,415	85,873	1,992	25,733	142,139	3,298
Other frozen fish, whole	2,248	21,503	499	2,151	22,554	523
Frozen fish fillets	39,163	782,481	18,154	37,903	696,227	16,152
Shrimp and lobster, frozen	842	77,381	1,795	377	37,518	870
Roes, frozen	1,251	20,633	479	736	12,027	279
Canned fish	180	9,764	227	121	7,193	167
Cod-liver oil	7,748	70,097	1,626	6,006	42,280	981
Lumpfish roes, salted	417	10,513	244	313	5,140	119
Other roes for food, salted	2,635	39,370	913	3,176	44,919	1,042
Roes for bait, salted	2,421	20,131	467	1,745	12,571	292
Herring, salted	17,815	185,130	4,295	24,450	245,063	5,685
Herring oil	21,030	164,005	3,805	22,283	94,694	2,197
Ocean perch oil	28	168	4	116	515	12
Whale oil	2,812	23,944	556	2,887	19,157	444
Fish meal	24,403	151,717	3,520	8,465	48,232	1,119
Herring meal	53,636	314,661	7,300	42,190	253,272	5,876
Ocean perch meal	976	5,703	132	2,163	10,097	234
Wastes of fish, frozen	3,875	11,888	276	2,722	7,794	181
Liver meal	407	2,690	62	371	2,563	59
Lobster and shrimp meal	129	475	11	-	-	-
Whale meal	1,211	6,694	155	100	558	13
Whale meat, frozen	1,809	14,395	334	1,961	13,518	314

Note: Values converted at rate of 1 krona equals 2.32 U.S. cents.

India

FISHERIES TRENDS AND EXPORTS, FISCAL YEAR 1963/64 AND JANUARY-MAY 1964:

India's fishery landings in fiscal year 1963/64 (April-March) totaled one million metric tons or about the same as in the past three years. The outlook in the Indian fisheries seems to be a potential for greater exports which in recent years have increased in value.

The all-India Seminar met in Ernakulam (Kerala) in September 1964 and developed a plan for improving the export of

India (Contd.):

Indian fishery products from now until the end of the Fourth Five Year Plan in 1970/71. It was forecast that during that period the value of exports might be increased from the 1963 level of almost $12.0 million to $42.0 million.

In fiscal year 1963/64 India exported 18,398 tons of fishery products valued at almost US$12.0 million compared with 10,859 tons valued at about $8.5 million the previous fiscal year. The United States took about 42 percent of India's fishery products exports in 1963/64 valued at about $5 million. Fishery products exports from that country to the United States were almost exclusively confined to frozen and canned shrimp and frozen spiny lobster tails.

Of the 16.2 million pounds of frozen and dried shrimp valued at $6.6 million exported by India in fiscal year 1963/64, the United States took 8.2 million pounds (value $3.9 million); total canned shrimp exports during that period were 2.4 million pounds valued at $1.4 million, of which nearly 2 million pounds (value $1 million) were shipped to the United States.

From 1952 to 1961, the United States aided fisheries development in the State of Kerala by contributing about $1 million. Most of those funds went to help that State's fishing industry by building 2 ice plants, providing 4 refrigerated trucks, and assisting in a technical and fishery training program. In 1963, a Cooley loan (funds derived from sales of surplus United States agricultural commodities) was made to an Indian fishing company in Cochin which at that time became affiliated with a United States firm. Reports are that funds from that loan had not yet been used as of November 1964.

A survey of the shrimp, tuna, sardine, and mackerel resources of that area in India was made in 1963 by a United States tuna packing firm and sponsored by the U. S. Agency for International Development (AID). The United States firm's team of experts conducting the survey indicated that 6 or 7 fishery facilities would be required to exploit the available fishery resources. The project as proposed by the United States firm will produce fish meal and oil, as well as other fishery products, in a location in the Vizakapatnam and Cochin areas.

United States aid to India in supplying inboard engines, fishing gear, machinery and equipment for ice plants, cold-storage equipment, and pilot fish meal plants has made significant contributions to the development of marine fisheries in Maharashtra and Gujarat. The AID program also supplied a nylon twine and net-making factory near Bombay which started operating during the year. (United States Consulate, Madras, November 13, 1964.)

India's exports of marine exports during January-May 1964 amounted to 7,349 metric tons valued at 25.3 million rupees (US$5.3 million), an increase of 17 percent in quantity and 6 percent in value from the same period in 1963. Besides dried fish, principal export items were: frozen shrimp, 5.2 million pounds valued at $2.4 million; dried shrimp, 2.9 million pounds ($0.9 million); frog legs, 265,000 pounds ($139,000). Frozen shrimp exports were up 34 percent in quantity and 21 percent in value from the same 5-month period in 1963. (Indian Seafoods, Vol. II, No. 1, June 1964.)

Note: See Commercial Fisheries Review, May 1964 p. 53; January 1964 p. 52.

Ireland

FISHING LIMITS EXTENDED TO 12 MILES:

Irish fishing limits were extended to 12 miles by the Maritime Jurisdiction (Amendment) Bill passed by the Irish Dail (Parliament) on November 5, 1964. The bill made it possible for the Government of Ireland to ratify and implement the "6-plus-6" fisheries convention approved by 13 nations in March 1964 at the European Fisheries Conference in London.

The Irish Minister of External Affairs announced that Ireland planned to designate Belgium, France, Germany, the Netherlands, Spain, and the United Kingdom as countries whose fishermen would have a right to fish in the 3- to 6-mile Irish coastal zone until December 1966. In applying the 3- to 6-mile limits to those fishermen, the base line will be the low-water mark until December 1965. After that time, straight base lines will be used.

The main effect of the new Irish fishing limits will be to exclude Eastern European and Scandinavian fishermen from Irish coastal waters. On the same day that the Maritime Jurisdiction (Amendment) Bill was considered and passed, the Irish Minister for Defense in reply to a parliamentary question noted that while the Irish Navy has 3 armed ships (corvettes), as a result of a shortage of key personnel only 1 of them can be operated at a time. The Minister of Defense said no decision had been made to purchase additional armed vessels for fishery protection. (United States Embassy, Dublin, November 13, 1964.)

Note: See Commercial Fisheries Review, May 1964 p. 40.

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FISHERIES REPORT RELEASED ON SURVEY MADE BY U. S. STUDY GROUP:

A report on the potential of the sea fisheries of Ireland, prepared by a team of United States fisheries specialists, was recently made public by the Government of Ireland, Dublin, announced the U. S. Department of the Interior on October 31, 1964.

The report was prepared this past summer by the four-man team from Interior's Bureau of Commercial Fisheries, and is the result of a cooperative study made at the request of the Government of Ireland.

The report includes recommendations that: (1) a stable Irish fishery policy is needed to encourage private investment; (2) the supply of fish and shellfish should be increased and stabilized; (3) the processing segment of Irish fisheries should be developed (the small population of Ireland limits the domestic market,

Ireland (Contd.):

so major expansion would come from export of processed fishery products); and (4) Ireland's marketing structure should be streamlined to handle increased production.

At a news conference in Dublin, Ireland's Parliamentary Secretary to the Minister of Lands thanked the United States for its cooperation and said he "looks forward to useful cooperation in the future with American authorities in relation to fisheries problems of mutual interest."

The United States fisheries specialists made the study in cooperation with the Irish Sea Fisheries Board and the Fisheries Bureau of Ireland's Department of Lands. The survey resulted from a meeting in October 1963 between Irish Prime Minister Lemass and the late President Kennedy.

The United States study group was headed by John B. Glude, a marine biologist. Other members of the team were Joseph W. Slavin, a technology specialist, Robert Lavell, an economist, and Keith A. Smith, a specialist in exploratory fishing.

Note: See Commercial Fisheries Review, Sept. 1964 p. 69.

Jamaica

FISHERY INDUSTRY EXPANSION PLANNED:

A £3.5 million (US$9.8 million) plan to develop Jamaica's fishing industry is being considered by the Jamaica Government, announced the Minister of Development and Welfare. The Minister states that the plan would provide employment for about 1,000 persons, contain provisions for exporting surplus fresh fish and shrimp, and include fish-canning operations.

The local press in Kingston also reported that the Minister referred to the possibility of a tuna-canning plant. There have been rumors over the past several years that the Government has been interested in attracting a tuna-canning plant to Jamaica. As of the end of October 1964, no final decisions had been made by the Government on the proposed fishery plan.

The Minister also announced a $2.5 million Fisheries Development Project to be financed

by the United Nations Special Fund and Caribbean governments. (United States Embassy, Kingston, October 29, 1964.)

Japan

FROZEN TUNA EXPORT MARKET TRENDS:

The price of Japanese whole frozen albacore tuna exported to the United States from Japan proper early in November 1964 declined to US$355 a short ton c.i.f. or $5 a ton less than gilled-and-gutted frozen yellowfin. The decline in the albacore price, even below that for yellowfin, was attributed to the large quantity of albacore landed by Japan's tuna longliners operating in the Atlantic Ocean. Almost all that albacore was transshipped to United States canneries at Puerto Rico. In addition, there have been substantial quantities of albacore transshipped to the United States from the Indian Ocean.

In mid-November about 500 short tons of frozen albacore were to be shipped to Puerto Rico from the newly designated transshipment port of Durban, South Africa. In late November, 1,500 tons of frozen albacore were to be shipped to Puerto Rico from Port Louis, Mauritius Island, which was also recently designated as a transshipment port. The Port Louis shipment was to be transported on a Norwegian vessel.

Catch of yellowfin tuna continued poor in the Atlantic Ocean as of early November. As a result, exports of Japanese-caught yellowfin tuna (gilled and gutted) to Italy were bringing the unusually high price of $420-425 a metric ton c. & f. (Suisan Tsushin, November 5; Suisancho Nippo, November 7, 1964.)

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Japan (Contd.):

EXPORT VALIDATIONS OF FROZEN TUNA AND TUNA LOINS TO U. S., JANUARY-SEPTEMBER 1963-64:

Japan's export validations of frozen tuna and frozen tuna loins to the United States in September 1964 totaled 13,274 short tons. Of that total, 48.8 percent were for albacore tuna, 45.8 percent for yellowfin, 0.2 percent big-eyed, 0.8 percent skipjack, and 4.4 percent tuna loins.

Japan's Export Validations for Frozen Tuna and Tuna Loins to U.S., January-September 1964 with Comparisons

Species	Sept. 1964			Jan.-Sept. 1964			Jan.-Sept. 1963			
	Direct	Trans-shipped	Total	Direct	Trans-shipped	Total	Direct	Trans-shipped	Total	Total 1963
	(Short Tons)									
Albacore, round	4,023	2,455	6,478	21,059	26,148	47,207	7,395	20,430	27,825	36,737
Yellowfin:										
Round	-	147	147	-	1,088	1,088	-	501	501	-
Gilled & gutted:										
20/100 lbs.	3,846	911	4,757	22,566	3,259	25,825	14,344	3,851	18,195	-
100 lbs. up	462	-	462	2,236	-	2,836	880	-	880	-
Drsd. with tail	50	664	714	75	3,971	4,046	-	3,684	3,684	-
Fillets	-	-	-	33	12	45	262	104	366	-
Total	4,358	1,722	6,080	24,910	8,330	33,840	15,486	8,140	23,626	33,370
Big-eyed:										
Gilled & gutted	-	-	-	30	30	60	20	4	24	-
Drsd. with tail	-	27	27	-	197	197	-	240	240	-
Fillets	-	-	-	37	3	40	6	42	48	-
Total	-	27	27	67	230	297	26	286	312	316
Bluefin fillets	-	-	-	-	1	1	-	374	374	374
Skipjack, round	-	103	103	8	2,969	2,977	70	2,312	2,382	3,762
Loins:										
Albacore	239	-	239	2,436	-	2,436	1,586	-	1,586	-
Yellowfin	347	-	347	2,871	-	2,871	2,048	-	2,048	-
Bluefin	-	-	-	-	-	-	157	-	157	-
Total	586	-	586	5,307	-	5,307	3,791	-	3,791	6,183
Grand Total	8,967	4,307	13,274	51,351	37,678	89,629	26,768	31,542	58,310	80,742

Source: Japan Frozen Food Exporters Association.

During January-September 1964, Japan's export approvals amounted to 89,629 short tons, an increase of 31,319 short tons or 54 percent more than the 58,310 short tons exported during the same period in 1963. On a species basis albacore exports were up 70 percent, yellowfin 43 percent, skipjack 25 percent, and tuna loins 40 percent. Exports of big-eyed tuna were down 5 percent.

Frozen tuna approved for export during January-September 1964 exceeds the total amount exported during all of 1963 by 8,887 short tons. (Fisheries Attache, United States Embassy, Tokyo, October 15, 1964.)

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TUNA PURSE-SEINE FLEET ARRIVES IN AFRICA:

The Japanese fishing company's five-boat tuna purse-seining fleet, led by the refrigerated mothership Chichibu Maru (1,600 gross tons), arrived at Freetown, Sierra Leone, on November 5, 1964. The fleet, which was to be joined by seven pole-and-line tuna vessels, was scheduled to start fishing immediately. The catches are to be sold to a large United States canning firm. (Shin Suisan Shimbun Sokuho, November 7, 1964.)

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PURSE-SEINING GEAR IMPROVEMENTS ADOPTED:

Purse-seine fishing off the Sanriku district (northeastern Japan) is drawing attention in Japan as one of the bright spots in the Japanese fishing industry as a result of the introduction of the power block and other improvements in fishing gear and techniques.

Japan (Contd.):

Purse-seining is conducted by one-boat seiners of up to 250 gross tons, which fish mainly for skipjack tuna; and by two-boat seiners, which fish primarily for bluefin tuna. Two-boat seining involves a total of 5-7 fishing vessels. They include two seiners of less than 80 gross tons each, skiffs, and transport vessels.

In 1962 one of Japan's large fishing companies introduced the power block, which was installed on the Keiyo Maru (240 gross tons). Two years of experiments with the power block, using a modified version of the United States purse-seine net, have sufficiently demonstrated the value of that mechanical device in reducing manpower requirements from about 27 to 18. An increasing number of two-boat purse-seine operators are reported to be contemplating converting to the one-boat type operation.

More recently, a mechanical net hauler was developed in Japan. Called the "side hauler," this gear, developed and patented by a Japanese fishing company of Ishinomaki, consists of a number of rubber "balls" mounted at two-meter intervals on a hydraulically-operated rotating shaft located on the side of the vessel. During net hauling, the "balls" on the rotating shaft cause the net to fold between them, thus facilitating hauling. One Japanese fishing company has adopted the side hauler for use on the two purse-seiners (140 gross tons each) assigned to the Chichibu Maru No. 2 (1,639 gross tons) mothership fleet, which was scheduled to commence skipjack fishing in the Atlantic Ocean off West Africa in mid-November 1964.

Advantages of the side hauler are: (1) manpower requirement for net hauling is reduced by one-third (in a two-boat operation from 70-80 men down to about 50); (2) net hauling time is reduced one-half; (3) net setting can be done ten times faster, and completely without human labor, because of its reversible feature; (4) damage to net during setting and hauling is greatly reduced; and (5) operation and repair are simple.

Other new equipment being adopted by Japanese purse-seiners includes the side thruster and the bow thruster. The thrusters prevent vessel drift during fishing operations and perform the task heretofore undertaken by skiffs.

The discovery of fish schools is the key to successful purse-seine fishing. New scouting methods, such as the use of television cameras on small unmanned aircraft and underwater radar are being studied. Also under study is the problem of engine vibration on large steel vessels, which has been found to cause dispersion of fish schools. Padding of the engine bed is being experimented as a means of reducing vibration. (Hokkai Suisan, October 19; Suisan Keizai Shimbun, October 19; Suisan Tsushin, October 16, 1964.)

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CANNED SALMON PRODUCTION AND MARKET TRENDS:

The Japanese fishing companies which purchased about 7,200 metric tons of Alaskan salmon (Prince William Sound fish) in August 1964 were expected to finish canning those fish (for export only) by the end of November. The companies had originally hoped to can 300,000 cases of pink salmon, but about one-third of the Alaskan pinks (when scheduled for canning) were not expected to meet export standards, so those fish were to be salted for sale on the Japanese domestic market. Of the revised pack target of 200,000 cases, about 40,000-50,000 cases were expected to be packed as fancy and the remainder as standard.

In addition, about 1,000 tons of chum salmon of Alaskan origin were scheduled for sale on the Japanese market. To avoid market disruption, the Fisheries Agency had ruled that only one-half or 500 tons should be placed on the market in 1964, with the remainder to be released in 1965. Frozen round chum of Alaskan origin sold through one brokerage firm brought 300 yen a kilogram (38 U.S. cents a lb.) for female fish and an average of 225 yen a kilogram (28 U.S. cents a lb.) for mixed (male and female) fish.

The Japan Canned Salmon Sales Company announced in late October the following export prices for their products:

Japanese Canned Salmon Export Prices, 1963-1964

Type, Can and Case Size	Price/Case			
	1964		1963	
	Shilling	US$	Shilling	US$
Red, standard 1/				
1/2-lb. 48's	157	21.98	147/6	20.65
1/4-lb. 96's	196	27.44	192/6	26.95
Silver, standard 2/				
1/2-lb. 48's	115	16.10	103	14.42
1/4-lb. 96's	137	19.18	-	-
Pink, fancy 3/				
1/2-lb. 48's	-	11.50	-	11.50
1/4-lb. 96's	-	13.50	-	13.50
Pink, standard 4/				
1/2-lb. 48's	-	11.00	-	11.00
1/4-lb. 96's	-	13.00	-	13.00

1/C.i.f., to be shipped by February 28, 1965. However, exports to Australia to be shipped by December 31, 1964.
2/C.i.f., to be shipped by December 31, 1964.
3/F.o.b., to be shipped by December 31, 1964.
4/F.o.b., to be shipped by February 28, 1965.

Quantity of canned salmon to be released as follows:

red salmon, standard: about 63,000 cases of 1/2-lb. 48's and 5,000 cases of 1/4-lb. 96's. The 1/4-lb. style made up of fish of Alaskan origin.

silver salmon, standard: slightly less than 5,000 cases.

pink salmon: of 450,000 cases consigned to the Sales Company, 360,000 cases sold, leaving on hand 90,000 cases. About 200,000 cases of pink of Alaskan origin expected to be canned by November's end, thereby, leaving on hand 290,000 cases.

The salmon of Alaskan origin (pink) was expected to be canned in the following styles and quantity:

1/2-lb. fancy	27,000 cases
1/2-lb. standard	110,000 "
1/4-lb. fancy	17,000 "
1/4-lb. standard	40,000 "

(Suisan Tsushin, October 30, 31, & November 2 & 9; Hokkai Suisan, November 9, 1964.

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CANNED SHRIMP EXPORTS, JANUARY-SEPTEMBER 1964:

Japan's exports of canned shrimp in January-September 1964 amounted to 372,224 cases (converted to 24 1-lb. cans). During that period Great Britain received the largest share, or 46 percent of the total exports which were 33 percent more than was received during the entire year 1963. The United States took about one-third Japan's total canned shrimp exports in the first 9 months of 1964 as compared with 59 percent during the entire year 1963.

Japan's export target for fiscal 1964 was originally set at 600,000 cases, of which 440,000 cases were to go to the United States and Canada. The export target was later reduced to 500,000 cases, with a larger quantity earmark-

Japan (Contd.):

Table 1 - Japan's Exports of Canned Shrimp by Country of Destination, January-September 1964

No. Cans per Case	Size	U. S.	Great Britain	Canada	France	Other Countries	Total
		(No. of Actual Cases)					
24/1-lb.	small	-	100	-	-	50	150
24/1/2-lb.	"	35,131	70,654	3,636	9,185	4,511	123,117
24/1/4-lb.	"	2,130	15,943	-	-	-	18,307
48/1/4-lb.	"	250	5	-	500	120	875
24/1/2-lb.	tiny	36,662	33,410	1,000	3,920	8,531	83,523
24/1/4-lb.	"	6,274	22,626	-	400	799	30,099
48/1/4-lb.	"	-	14,230	-	-	4	14,234
24/1/2-lb.	broken	44,866	9,300	44,692	-	2,491	101,349
24/1/4-lb.	"	2,262	40,930	-	-	241	43,433
46/1/4-lb.	"	949	2,050	-	-	25	3,024
Total std.	cases 1/	123,191	169,598	49,328	13,805	16,302	372,224
Export target - 1964 2/		165,000	230,000	65,000	20,000	20,000	500,000

1/Converted to 24 1/2-lb. cans per case.
2/Total export target reduced to 500,000 cases from original estimate of 600,000 cases.
Source: Japan Canned Crab Sales Company; since May 1, 1963, has acted as sole sales agent for canned shrimp.

Table 2 - Japan's Exports of Canned Shrimp by Country of Destination, January-December 1963

No. Cans per Case	Size	U. S.	Great Britain	Canada	France	Other Countries	Total
		(No. of Actual Cases)					
24/1/2-lb.	-	134,859	51,678	18,364	11,018	15,587	231,506
24/1/2-lb.	small	86,399	59,110	26,750	22,055	4,620	192,934
48/1/4-lb.	"	1,933	9,000	-	4,535	1,182	16,650
24/1/2-lb.	tiny	52,825	1,350	6,050	3,650	3,795	67,670
48/1/4-lb.	"	500	200	-	235	3,682	4,617
24/1/2-lb.	broken	111,511	50	26,080	-	2,264	139,905
48/1/4-lb.	"	7,130	6,000	-	-	665	13,795
Total std.	cases 1/	395,157	127,388	71,244	41,493	31,795	667,077

1/Converted to 24 1/2-lb. cans per case.
Source: Ministry of Finance and Japan Canned Crab Sales Company.

Table 3 - Japan's Exports of Canned Shrimp by Country of Destination, January-December 1960-63

Calendar Year	No. Cans per Case	U. S.	Great Britain	Canada	France	Other Countries	Total
		(No. of Std. Cases)					
1963	24/1/2-lb.	395,157	127,388	71,244	41,493	31,795	667,077
1962	24/1/2-lb.	199,944	104,057	84,385	8,345	21,205	417,936
1961	24/1/2-lb.	31,314	11,876	19,051	2,082	10,980	75,303
1960	24/1/2-lb.	2,366	3,478	453	551	7,576	14,424

Source: Ministry of France.

ed for Great Britain but with fewer shipments to the United States. (Fisheries Attache, United States Embassy, Tokyo, November 5, 1964.)

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FISH CANNERS DISCUSS PRODUCTION COSTS WITH FISHERIES AGENCY REPRESENTATIVES:

The Japanese Fisheries Agency has plans to extend its authority to the manufacture and sale of fishery products. It will also cooperate in the promotion of Japanese fishery exports. That was disclosed at a Tokyo conference attended by officials of the Fisheries Agency and representatives of the Japanese canned fish industry. The purpose of the conference was concerned with promoting exports of Japanese canned fishery products.

Fig. 1 - Cutting table in a tuna cannery in Hiroshima, Japan.

Japanese tuna canners at the conference asked the Fisheries Agency to set up some control over the supply of tuna for canning. The tuna canners said Japanese exports of frozen tuna were increasing and causing scarcities and high prices on tuna used for canning.

Fig. 2 - Interior of a tuna cannery in Hiroshima. In right foreground is a vacuum seamer.

Japanese land-based salmon canners requested an extension of the fishing period in Area B (Japanese-U.S.S.R. Fisheries Treaty waters south of 45° N. latitude) in order to ease the high costs of fish due to light landings.

Canned fish industry representatives at the conference also expressed an interest in lower prices for metal cans and lower interest rates for financing. (Nihon Kogyo, October 19, 1964.)

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Japan (Contd.):

POSITION DEVELOPED FOR INTERNATIONAL NORTH PACIFIC FISHERIES COMMISSION MEETING:

The Japanese Fisheries Agency, on November 12, 1964, according to the Japanese press, held a meeting with Japanese industry advisors to develop the position Japan should take at the Annual Meeting of the International North Pacific Fisheries Commission (Canada, Japan, and United States) which convened at Tokyo from November 16, 1964. The position adopted at that meeting with respect to salmon and halibut was believed to be essentially as follows:

1. With regard to the regulation of salmon fishing in the intermingling area west of the provisional abstention line, Japan will maintain her traditional position that Japanese high-seas fishing, which is not subject to restrictions under the present Treaty, shows no evidence of adversely affecting reproduction of the Bristol Bay red salmon. However, while paying careful attention to resource conservation, Japan should stress the establishment of rational joint conservation measures to be carried out after the conclusion of a new treaty without regard to the existing provisional abstention line. Concerning other salmon species and king crab, Japan will bear in mind her relations with the Soviet Union and continue to maintain her earlier attitude.

2. As for Bering Sea halibut conservation measures for 1965, since halibut catches in 1964 were extremely poor, with indications of declining abundance, Japan will propose closing Triangle Area 3B to rehabilitate the stocks.

3. Japan will strongly press for removal of restrictions on halibut fishing in Area 1 and Area 3B South.

The Japanese position adopted at the November 12 meeting with respect to trawl operations in the Gulf of Alaska and in the waters south of the Alaska Peninsula is believed to be as follows:

1. Japan will avoid detailed discussions on the effect trawl operations have on halibut stocks in Convention waters, since bottomfish fishing is not restricted by the Treaty. Moreover, the species of fish taken in the Gulf of Alaska and in waters south of the Alaska Peninsula are bottomfish other than halibut.

2. In view of the relatively large number of foreign fishing vessels other than those of Japan, the United States, and Canada operating in those waters, as well as the very low percentage of halibut taken incidentally by the Japanese trawlers, Japan plans to increase her trawl fleet in the Gulf, although not on a substantial scale. Japan should notify the member countries of her intentions of conducting year-round fishing, including mothership-type operations, in those waters. To avoid catching halibut, Japan should exert efforts to develop improved stern-trawling techniques.

3. Japan will oppose closure of areas to trawling since Japanese trawl operations have not adversely affected the halibut stocks. Reasons for opposing such an action are: (1) trawling for bottomfish other than halibut is not restricted by the Treaty; and (2) incidental halibut catches are returned to the ocean, so there is no need to establish closed areas to assure protection of that species.

4. Concerning Article III-1 of the Convention, which provides for joint conservation measures for those species of fish listed in the Annex, Japan will recommend that further investigations be made since data presently available shed very little information. (Suisan Tsushin, November 14, 1964.)

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INDUSTRY MEETING SCHEDULED TO DEVELOP POSITION FOR NORTHWEST PACIFIC FISHERIES COMMISSION MEETING:

The Japanese Fisheries Agency scheduled a series of meetings, beginning in early December 1964, to study the position that Japan should take at the Ninth Annual Meeting of the Northwest Pacific Fisheries Commission (Japan and U.S.S.R.) scheduled to begin in Tokyo, March 1, 1965).

According to informed sources, Japan likely will request an increase in salmon catch quotas for both Areas A and B (1964 quota for each area was 55,000 metric tons), as well as an increase in the king crab production quota. Japan's share of the 1964 king crab production quota of 630,000 cases (48 No. 2 or 6.5 oz. cans) was 252,000 cases. The Japanese industry is said to feel that the request for an increase in salmon catch quota is not unreasonable inasmuch as 1965 is a dominant year for Asian pinks. Also, the condition of the salmon resources as a whole is almost certainly to be far better than it was in 1964.

However, based on the experience of the last few sessions, these same sources believe that the negotiations will be anything but smooth. Their belief is based on the following reasoning: (1) As yet there has not been a formal exchange of notes on increasing the catch in 1965 (peak year for pinks) as there was prior to the Seventh Session; (2) unexpected poor catch of salmon in 1964; (3) report broadcasted by Radio Moscow towards the end of the 1964 fishing season that the catch quota agreed on at the Eighth Annual Meeting was much too high; (4) increased interest shown by Soviet Union towards regulating the fishery in Area B; and (5) the effect of the Japan-United States king crab negotiation and the negotiations to revise the Tripartite Fisheries Treaty or the International North Pacific Fisheries Convention--Canada, Japan, United States. (Suisan Keizai Shimbun, November 14, 1964.)

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BERING SEA BOTTOMFISH FISHERY:

The Japanese fishing companies operating bottomfish fleets in the Eastern Bering Sea have begun a study to determine fishing plans

Japan (Contd.):

Main deck of a Japanese factoryship in Bering Sea. In center a netload of fish is being unloaded from a lighter.

for 1965. Their fleets landed in 1964 a combined total of 411,130 metric tons of bottomfish, surpassing 1963's landings by about 100,000 tons. However, from a management standpoint, the companies have not done too well due to a drop in fish prices and higher operational expenses. As a result, the firms hope to devise measures to stabilize their operations and are considering such measures as reducing the number of catcher vessels assigned to motherships and reducing the number of non-fishing motherships and replacing them with large stern trawlers. (Suisan Keizai Shimbun, October 30, 1964.)

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TRAWLING OPERATIONS IN GULF OF ALASKA:

The six Japanese trawlers operating in the Gulf of Alaska waters as of October 13, 1964, caught a total of 17,000 metric tons of bottomfish (rockfish 11,000 tons; shrimp 2,700 tons; sablefish 900 tons; flatfish 600 tons; others 1,800 tons). This was an increase of 8,000 metric tons over the 1963 landings, which totaled 9,000 metric tons.

The trawler Tenryu Maru (545 gross tons), operated jointly by two Japanese firms, was expected to terminate operations around October 20. The other 5 trawlers were scheduled to continue operations in the Gulf until the end of October. (Suisancho Nippo, October 16, 1964.)

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DEVELOPMENT OF NEW FISHING GROUNDS PLANNED:

Japan's Fisheries Agency plans to start developing new fishing grounds at home and abroad starting fiscal year 1965 with the objective of increasing fish resources. The reason behind that plan is that the demand-supply relationships of fish are getting out of balance because fish production has been static during the past 2 or 3 years, while the demand centered on high- and medium-grade fish is continuing to increase. Another reason is that, if this situation continues, there is the fear that Japan, which is a fisheries nation, may become an importer of fishery products. Therefore, from the standpoint of developing large shallow-sea fishing grounds at 20 places along the coast of Japan, the Fisheries Agency plans first to conduct topographical and boring surveys at 6 of those places in fiscal year 1965, and to formulate a new fishing grounds development project. Moreover, in order to develop the undeveloped sea areas south of Africa, Australia, and South America, the Fisheries Agency plans to build a new type 2,600-ton vessel in 2 years starting in fiscal year 1965, and to send it first to sea areas around Australia.

The survey conducted by the Fisheries Agency reveals that the keynote of the demand-supply relationships of marine products has gotten out of balance during the past 2 or 3 years and that the prices of such products are also tending to rise. Fishery landings are showing a leveling-off trend. They amounted to 6,710,000 tons in 1961; 6,860,000 tons in 1962; and 6,690,000 tons in 1963. On the other hand, the focus of demand for marine products is moving from fish for popular use, such as horse-mackerel, mackerel, and mackerel-pike to high- and medium-grade fish such as bream, bass, lobster, and yellow tail. The demand level was up to 7,110,000 metric tons in 1962. Thus, demand-supply relationships are tending to be out of balance.

Moreover, under a mid-term economic plan, maximum production in 1968 is estimated at between 7,400,000 tons and 7,600,000 tons, while the demand level is estimated at 9,540,000 tons. The gap between the two figures is wide. Under the circumstances, Japan will either have to import large quantities of fishery products or locate new fishing grounds. (Translation from the Japanese periodical Nihon Kaizai, United States Embassy, Tokyo, November 5, 1964.)

* * * * *

FROZEN MACKEREL EXPORTS TO RUMANIA:

Several Japanese trading firms are actively engaged in exporting frozen mackerel to Rumania and other countries in eastern Europe. A Tokyo trading company reported signing a long-term contract to export monthly 750 metric tons of East China Sea mackerel to Rumania. Another trading company also signed a contract to export 720 metric tons to that country. Both transactions are said to have been concluded at export prices of around US$286 a metric ton c.i.f. Rumania. (Minato Shimbun, October 17, 1964.)

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FISHING UNION ADOPTS FIXED MINIMUM WAGE SYSTEM:

The Fishermen's Union (membership 2,529) of Muroto, Kochi Prefecture, Japan, has signed a wage contract with the Murotomisaki Boatowners Association calling for the payment of a minimum of 22,500 yen (US$62.50) a month

Japan (Contd.)

in fixed wages for members sailing on vessels under 200 gross tons and 23,500 yen ($65.28) a month for those sailing on vessels over 200 gross tons. In addition, the contract calls for production incentives in the form of bonuses, calculated on the basis of vessel size, value of landing, and days out fishing. Bonuses are expected to total no less than 25,000 yen ($69.44) a month, so the monthly income of the lowest level seaman is expected to total close to 50,000 yen ($138.88), or about 15 percent higher than under the former catch-share system.

The new wage agreement also provides for 12 days of leave with pay, trip expenses for home visits, no work on Sundays, legal holidays and eight-hour work days while in port, and eight hours rest per day while at sea. (Suisancho Nippo, October 29, 1964.)

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CONSTRUCTION BIDS FOR FORMOSAN TUNA VESSELS AWARDED IN JAPAN:

Awards for the construction in Japan of 16 Formosan tuna vessels were formally announced in early November 1964. The Japanese shipbuilding firm awarded one contract is to build three 1,300-ton vessels, another firm awarded a contract is to build eight 300-ton vessels, and still another firm five 300-ton vessels. (Suisancho Nippo, November 9, 1964.)

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VESSEL CONSTRUCTION LOAN OBTAINED FROM GREAT BRITAIN:

A Japanese fishing firm has borrowed US$3.0 million from a London bank to be partly applied for the payment of stern trawlers that company plans to build. Under the loan agreement, the loan will be payable in five years, including a two-year deferment period. Interest rate is 6 percent per annum. Reportedly, the interest rate for a similar loan secured in Japan is 9.6 percent per annum. (Nihon Suisan Shimbun, October 9, 1964.)

* * * * *

IMPORTATION OF 71,000 TONS OF FISH MEAL:

The Ministry of International Trade and Industry of Japan announced that it has authorized foreign funds for the importation of 71,000 metric tons of fish meal for the period November 1964-March 1965. Of the 71,000 tons, 50,000-60,000 tons had been contracted for delivery at US$131-132 a metric ton c.i.f. The contracts were negotiated before the increase in price of Chilean and Peruvian fish meal. The current prevailing price of Chilean and Peruvian fish meal is estimated at US$151-153 a metric ton c.i.f. Japan.

Japanese imports of foreign meal after April 1965 are expected to total 13,000-15,000 metric tons a month. (Suisan Tsushin, November 6, 1964.)

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PRODUCTION TARGET OF 1964/65 ANTARCTIC WHALING EXPEDITION:

Three Japanese fishing companies will operate 7 factoryships in Antarctic waters during the 1964/65 international Antarctic whaling season. This is the same number of vessels as operated during the 1963/64 season. With the exception of the factoryship Nisshin-Maru No. 2, which was scheduled to sail from Japan on November 7, 1964, the other 6 vessels had departed for the whaling grounds at an earlier date.

Whale catcher boat alongside whaling factoryship to receive supplies and fuel.

The catch target for sperm whales is set at 1,870 head, a decrease of 1,030 head, or 35.5 percent below the target of 2,900 head set for the 1963/64 season. The cutback in catch for the current season is attributed to the large quantity of unsold stocks of sperm whale oil (11,400 metric tons) produced by the Antarctic and North Pacific whaling expeditions during the previous season.

Japan (Contd.):

Baleen Whale Production Target of Japan's 1964/65 Antarctic Whaling Expedition

Product	Total	
	1964/65 Season	1963/64 Season
	(Metric Tons)	
Oil	85,494	95,376
Frozen meat	143,136	144,418
Salted meat	6,280	6,235
Meal, bone powder, etc	5,511	5,054
Total	240,421	251,083
Yield per head	57.79	54.60
Blue-whale units	4,160	4,600

The production target of Japan's 1964/65 Antarctic expedition for baleen whale oil, meat, meal and bone powder is shown in table.

(Fisheries Attache, United States Embassy, Tokyo, October 28, 1964.)

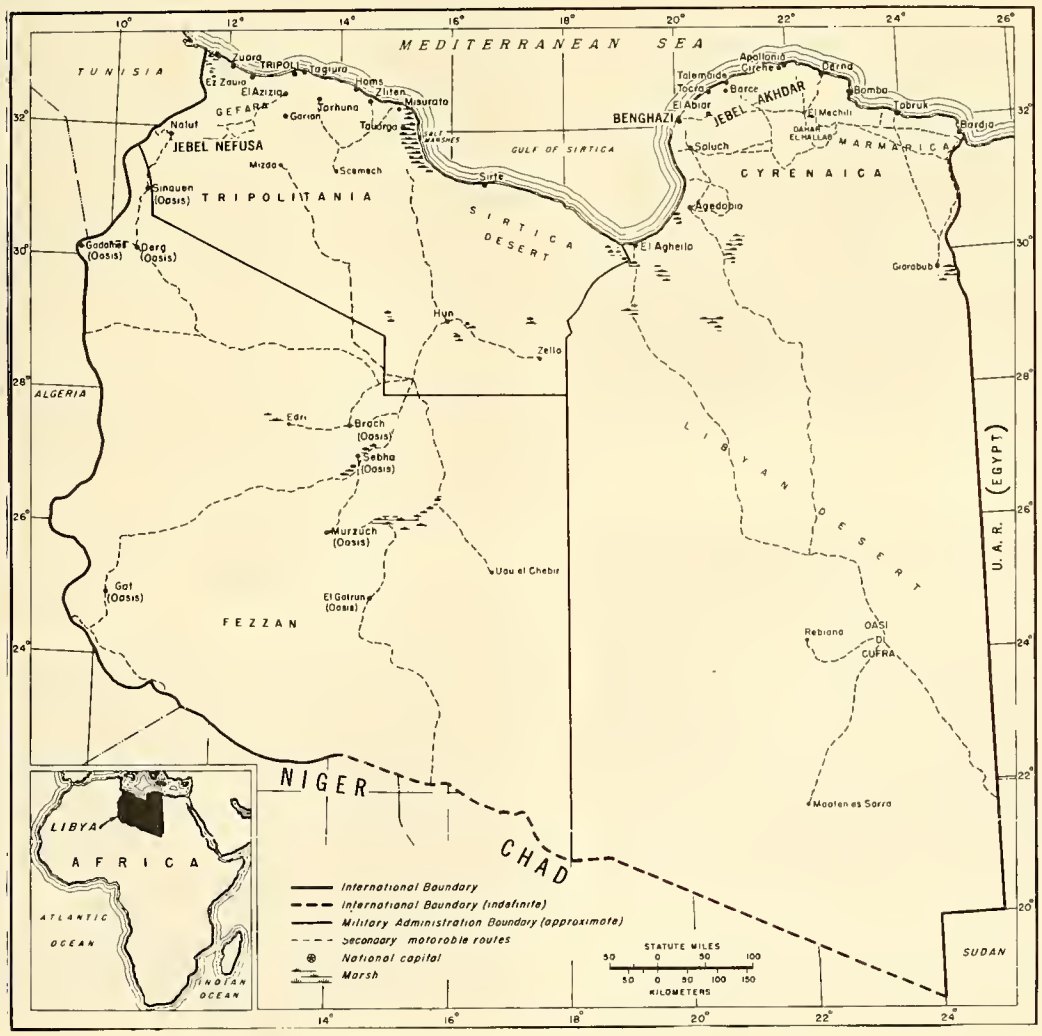
Note: See Commercial Fisheries Review, January 1964 p. 59.

日本

Libya

GREEK VESSELS LICENSED TO OPERATE IN LIBYAN WATERS:

The Government of Libya allowed Greek trawlers and sponge vessels to operate in certain Libyan territorial waters in 1964 after paying the following license fees: trawler ŁL500 (US$1,400); sponge fishing vessel ŁL250 ($700); and simple fishing vessel ŁL100 ($280).



Libya (Contd.):

Each Greek trawler obtaining a license to fish in Libyan waters was required to take three Libyan nationals on board for fisheries training. (Alieia, April 1964.)

Note: Libyan pound 1.00 equals US$2.80.

New Zealand

FOREIGN TRADE IN FISHERY PRODUCTS, 1964:

New Zealand's total exports of fishery products for the fiscal year ended June 1964 were valued at US$4.3 million. Those exports included 2.8 million pounds of spiny lobster tails valued at slightly more than $3 million--the biggest money earner in New Zealand fishery exports.

Among other export items during the period were 5.5 million pounds of fresh and frozen fish valued at $1.2 million, and 16,571 imperial gallons of fish oil valued at about $166,000.

New Zealand's imports of fishery products consisted almost exclusively of canned fish. For the year ended June 1964, a total of 6.3 million pounds of canned fish valued at $2.6 million was imported. (New Zealand Commercial Fishing, September 1964.)

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DYE-LESS COLORING TREATMENT FOR DARK-MEAT FISH DEVELOPED:

A method of coloring dark-meat fish without the use of dyes has been developed at Massey University, New Zealand. The technique was developed for New Zealand "kahawai," but it might also be applied to mackerel and other dark-meat fish.

The New Zealand Health Department, which had previously disallowed the coloring of canned kahawai for the New Zealand market, is understood to be favorably disposed to the new method.

The new coloring technique involves injecting or soaking fish with some of the same ingredients as are used in the curing of meat. The effect of such treatment on dark-meat fish is to induce a pink tint into the fish after cooking instead of the usual unattractive brownish color.

As the use of the coloring agent has been adopted by meat processors for many years, it is not expected to raise any objections from health authorities.

There is reported to be a marked consumer resistance to kahawai as a table fish because of the unappetizing appearance when cooked, even though it has a high food value and a good flavor. The approval of the new coloring technique by the New Zealand Minister of Health will remove one marketing obstacle. It is thought, however, that to overcome traditional objections to kahawai it may be necessary to change its name to give it a different image. "Native salmon" is one of the new names suggested. (New Zealand Commercial Fishing, September 1964.)

Nicaragua

NEW EXPORT TAX ON FISHERY PRODUCTS:

Nicaraguan Decree No. 973, establishing an export tax on fishery products, was published in La Gaceta No. 197, August 28, 1964. The export tax replaces the profits tax levied under Article 28 in the Special Law on Exploitation of Fish of 1961.

Under the new law, the export tax rates per pound are as follows: fresh unprocessed shrimp C0.36 (5.14 U.S. cents); frozen shrimp C0.21 (3.0 U.S. cents); dried or dehydrated shrimp C0.07 (1.0 U.S. cent); fresh unprocessed lobster tails C0.35 (5.0 U.S. cents); frozen lobster tails C0.175 (2.5 U.S. cents); fresh whole lobsters C0.21 (3.0 U.S. cents); frozen whole lobsters C0.105 (1.5 U.S. cents); chilled whole fish C0.07 (1.0 U.S. cent); frozen whole fish C0.021 (0.3 U.S. cents); chilled fish fillets C0.14 (2.0 U.S. cents); frozen fish fillets C0.07 (1.0 U.S. cents); processed turtles C7.00 (US$1.00); live turtles C21.00 (US$3.00).

The indicated export tax must be paid before fishery products are exported from Nicaragua. (United States Embassy, Managua, October 29, 1964.)

Note: Nicaraguan cordobas 7.00 equal US$1.00.

Norway

GOVERNMENT ASKS FOR INDUSTRY VIEWS ON EUROPEAN "6-PLUS-6" FISHING LIMIT CONVENTION:

All organizations within the Norwegian fishing industry have received a questionnaire from the Norwegian Ministry of Fisheries asking for their views on the "6-plus-6" fishing limit convention signed by 13 of the 16 countries attending the European Fisheries Convention in London in January 1964. Norway, Iceland, and Switzerland did not sign the Convention. (News of Norway, November 19, 1964.)

Peru

FISH MEAL INDUSTRY TRENDS, SEPTEMBER 1964:

Peruvian fish meal production in September 1964 totaled 49,000 metric tons, about the same as in September 1963. Peruvian fish meal production in January-September 1964 totaled 1,059,000 tons, up 28 percent from Peruvian production in January-September 1963.

Peruvian exports of fish meal in September 1964 were 82,000 tons bringing shipments for January-September 1964 to 1,098,000 tons, almost 25 percent ahead of the same period in 1963.

Spot prices for Peruvian fish meal eased somewhat in October 1964 as anchoveta fishing showed an expected seasonal improvement. In late October 1964, prices for November 1964 deliveries of Peruvian meal were quoted at US$135 per metric ton f.o.b. Peru; quotations for December 1964 shipments were down to around $126. In early October 1964, spot shipments were being quoted as high as $145-150. (United States Embassy, Lima, November 4, 1964.)

Editor's Note: Some reports indicate that in excess of 500,000 tons of fish meal have been sold forward for the first half of 1965 at $100-108 a ton by the Consorcio Pesquero del Peru S. A.

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FISHERY CATCH IN 1963 TOPS THAT OF ALL OTHER NATIONS:

Peru caught more fish than any other nation in 1963, reported the Food and Agriculture Organization (FAO), October 30, 1964. Fishery landings by that country totaled 6,901,300 metric tons in 1963, as compared with Japan's catch of 6,697,800 tons. Japan had been the world's leading fishing nation since FAO began collecting world fishery catch statistics in 1947.

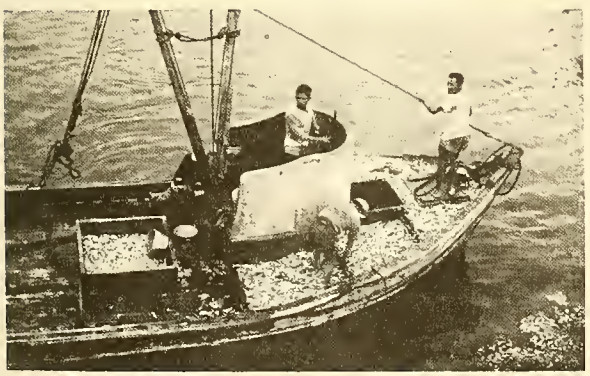

Fig. 1 - Peruvian fishing vessel with hold and decks loaded with anchovetas getting ready to unload.

Fig. 2 - Portion of Mancora tuna fleet.

Fig. 3 - Unloading tuna at Chimbote, Peru.

Fig. 4 - Tuna caught by small Peruvian boats are landed on the beach, awaiting to be picked up by truck for trip to freezer.

The bulk of the Peruvian 1963 catch was made up of anchoveta, a small fish found in great schools a few miles off the Peruvian

Peru (Contd.):

coast. The anchoveta is used for reduction in fish meal and oil for animal feeding, and is the principal factor in Peru's position as the world's leading exporter of fish meal. Peru's fishery catch now is close to 150 times larger than the 47,700-ton catch in 1948. (Food and Agriculture Organization, Rome, October 30, 1964.)

Philippine Republic

PURSE-SEINE FISHERY BEING DEVELOPED:

Since early 1963, a Norwegian master fisherman has been showing Philippine fishermen how to fish with purse-seine nets. The Norwegian expert was sent by the Food and Agriculture Organization to help the Philippine Fisheries Commission develop a purse-seine fishery. Striking success has been reported in the project. The Philippine private company which did pioneering work in the new fishery now has five purse-seine vessels in almost year-round operation. It also operates 11 carrier vessels which carry the purse-seine catch to metropolitan markets.

Fig. 1 - Philippine purse-seine vessel scouting for mackerel in the Sulu Sea off Palawan Island in the western Philippines. The vessel is equipped with an echo-sounder.

Fig. 2 - Philippine purse-seine vessel ready to begin night-light fishing in Sulu Sea. Note metal lamps set over the side to attract fish. Often it is midnight before enough fish are attracted to justify setting the purse-seine net.

Fig. 3 - Philippine fishermen brailing mackerel from purse-seine net. As the fish are hauled in, ice is thrown over from the carrier vessel alongside. The fish and ice are then shoveled into tubs which are hoisted to the carrier vessel to be transported to market.

Other Philippine private companies are entering the purse-seine fishery. By the end of 1964, a total of 30 Philippine purse-seine vessels were expected to be in operation. The new purse-seine fishery is one phase of the Philippine project to achieve self-sufficiency in fish. (Food and Agriculture Organization, Rome, October 28, 1964.)

Note: See Commercial Fisheries Review, February 1963 p. 85.

Portugal

CANNED FISH EXPORTS, JANUARY-JUNE 1964:

Portugal's total exports of canned fish in oil or sauce during the first half of 1964 were at about the same quantity level as in the comparable period of 1963. Sardines accounted for 79 percent of the total canned fish exports in the first half of 1964.

Portugal's principal canned fish buyers during the first half of 1964 were Germany with 5,384 metric tons, the United Kingdom with 3,955 tons, France 3,242 tons, the United States 2,737 tons, Italy 2,461 tons, and Belgium-Luxembourg 2,205 tons. Germany's purchases of canned fish from Portugal

Portugal (Contd.):

Portuguese Canned Fish Exports, January-June 1963-64				
Product	January-June			
	1964		1965	
	Metric Tons	1,000 Cases	Metric Tons	1,000 Cases
In oil or sauce:				
Sardines	23,754	1,250	23,103	1,216
Chinchards	1,693	89	570	30
Mackerel	1,709	68	2,170	86
Tuna and tuna-like	610	20	1,003	33
Anchovy fillets	1,743	174	2,338	233
Others	405	21	162	8
Total	29,914	1,622	29,346	1,606

in January-June 1964 increased 13 percent from those in the same period of 1963. Purchases by the United Kingdom were up 10 percent, and those by France were up 25 percent. But purchases by the United States and Italy in the first half of 1964 were down 19 and 36 percent, respectively. (Conservas de Peixe, August 1964.)

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PRIORITY FISHERY PROJECTS UNDER NEW THREE-YEAR ECONOMIC DEVELOPMENT PLAN (1965-1967):

Preliminary proposals under the new Portuguese Three-Year Economic Development Plan for 1965-1967 were announced by the Portuguese Minister of State on October 6, 1964, although the Plan must be reviewed further. The Plan includes Government and private investment projects considered most important by the Portuguese Government. Included are priority fishery investments in Continental Portugal totaling over US$11 million and priority fishery investments in Portuguese Overseas Territories totaling over $35 million.

In Continental Portugal, the priority fishery investments are mostly for the construction of new fishing vessels. The high rate of obsolescence in the Portuguese fishing fleet is of concern to the Portuguese Government, according to previous reports. Since 1959, the Portuguese Treasury has lent over $14 million to the Fund for the Renovation and Equipping of the Fishing Industry.

Table 1 - Value of Portuguese Planned Priority Fishery Investments in Continental Portugal[1/] During 1965-1967[2/]

Sector and Project	Value	
	1,000 Escudos	US$1,000
Cod Fishery:		
Construction of 3 trawlers of 2,800 gross tons each	102,000	3,570
Replacement and improvement of equipment on existing cod-fishing vessels	16,670	583
Total cod fishery	118,670	4,153
Trawl Fishery:		
Construction of 1 freezer-transport vessel of 3,000 gross tons	35,000	1,225
Construction of 4 steel coastal trawlers of 150 gross tons each	24,800	868
Construction of 2 wooden lobster trawlers of 300 gross tons each	20,000	700
Construction of 2 freezer trawlers (for shellfish) of 130 gross tons each	8,670	303
Construction of 5 offshore trawlers to work with freezer vessels	24,000	840
Total trawl fishery	112,470	3,936
Sardine Fishery:		
Replacement of old seine vessels by new vessels of 50 gross tons each; and reconstruction and improvement of existing equipment	5,340	187
Tuna Fishery:		
Construction of 4 offshore tuna vessels, each having a 100-ton fish-hold capacity	28,000	980
Local Fishery:		
Motorization, improvement of equipment, and repair of vessels	7,000	245
Oyster Industry:		
Nurseries and purification plants	800	28
Marketing:		
Freezing plants and sales stores at:		
Matosinhos	12,670	443
Figueira da Foz	1,470	52
Lisbon	8,000	280
Funchal (Madeira)	4,000	140
Horta (Azores)	5,340	187
Total marketing	31,480	1,102
Support for Distant Fishing:		
Equipment for freezing and storing fish	14,400	505
Total planned priority fishery investments in Continental Portugal	318,160	11,136

1/Includes Madeira and the Azores.
2/Preliminary.
Note: Escudos 28.58 equal US$1.00.

Portugal (Contd.):

Table 2 - Value of Portuguese Planned Priority Investments in Overseas Territories During 1965/1967 1/

Territory	Research and Technical Assistance		Fishing Fleet		Land Facilities and Local Marketing		Total	
	1,000 Escudos	US$1,000	1,000 Escudos	US$1,000	1,000 Escudos	US$1,000	1,000 Escudos	US$1,000
Cape Verde	7,500	262	211,500	7,403	39,000	1,365	258,000	9,030
Angola	30,000	1,050	150,000	5,250	190,000	6,650	370,000	12,950
Mozambique	18,000	630	220,000	7,700	90,000	3,150	328,000	11,480
Guinea	4,500	158	6,000	210	7,500	262	18,000	630
S. Tome-Principe .	4,000	140	2,500	87	13,500	473	20,000	700
Timor	6,000	210	2,000	70	2,000	70	10,000	350
Total overseas territories . .	70,000	2,450	592,000	20,720	342,000	11,970	1,004,000	35,140

1/Preliminary.

Most of the proposed priority fishery investments in overseas territories are in Angola ($13.0 million), Mozambique ($11.5 million), and Cape Verde ($9 million). The proposed overseas fishery investments include substantial outlays for land facilities and local marketing as well as for fishing vessels. For research and technical assistance, the Plan proposes investment of over $1 million for Angola, $630,000 for Mozambique, and smaller amounts for other Territories. (United States Embassy, Lisbon, November 11, 1964.)

Note: See Commercial Fisheries Review, June 1964 p. 57.

Senegal

SENEGALESE TUNA INDUSTRY WILL RECEIVE AID FROM THE SOVIET UNION:

During the visit of Senegal's Foreign Minister to Moscow (October 25 to November 1, 1964), an agreement was signed between the 2 countries under which the U.S.S.R. will extend credits to Senegal amounting to about US$6.7 million. The loan, bearing a 2.5 percent annual interest charge, will be repaid in Senegalese exports to the U.S.S.R. over 12 years. With the Soviet credits and technical aid, Senegal will construct a tuna cannery. The U.S.S.R. will also deliver to Senegal 10 tuna vessels, provide a team of technicians to operate the tuna cannery for the first 2 years, and sponsor a training program for Senegalese technicians in the Soviet Union.

Somali Republic

AID APPROVES LOAN FOR FISHERIES VENTURE:

The U. S. Agency for International Development (AID) has approved a $543,000 loan to the Somali American Fishing Co., a joint organization of a Massachusetts firm and a Somali group. The loan will help finance a new fisheries plant near Alula on the northern tip of the Somali Republic bordering the Indian Ocean and the Gulf of Aden. The new plant will process and freeze fisheries products, mainly for export.

A local Somali fisherman weighing fish.

The loan will be made and repaid in United States dollars. Interest on the loan will be payable semiannually until June 30, 1967, and annually thereafter. Principal will be repayable in installments over a period of about 10 years beginning in 1967. (AID United States Embassy, Mogadiscio, October 22, 1964.)

South Africa Republic

FIVE TUNA VESSELS ORDERED BY FISHING FIRM:

A contract for the construction of five 300-ton all-steel refrigerated tuna fishing vessels, valued at US$1.4 million, was awarded in August 1964 to a shipbuilding firm in Durban, South Africa, by a Cape Town fishing company. The contract is the largest that has been signed for the construction of vessels in South Africa. The first of the 5 vessels will be ready for delivery 8 months after placement of the order. The remainder of the vessels will be delivered--one every two months until the order is completed.

The vessels will be 110 feet long overall, with a beam of 22 feet, loaded draft of 9 feet, and with Diesel-powered engines capable of a speed of 12 knots. They will be fitted with 4 freezing tunnels of 10-ton capacity cooled to a temperature of -35° F. After freezing, the fish will pass to the main hold which will have a capacity of 88 tons with a temperature of -25° F. Each vessel will be fitted with fish-finding equipment, radiotelephone, and direction finders. Crew accommodations are provided for 18 persons.

Among the shipbuilding countries bidding for the contract were Holland, Spain, Denmark, and East and West Germany. It was reported that the strongest competition came from East German shipbuilders.

A spokesman for the Cape Town fishing company said the vessels will use the Japanese long-lining method for fishing tuna--laying 35 miles of long lines (carrying 2,000 hooks) to be hauled in every 24 hours. He added that the fishing waters around South Africa have a great potential and that this was only the beginning as far as tuna fishing was concerned. Plans were that the 5 new vessels would probably operate off Durban during the Cape off-season (March-October).

The company spokesman said his firm already had 3 refrigerated vessels and that a fourth was to be equipped with refrigeration facilities. In addition, the Cape Town fishing company recently purchased a 1,500-ton former Spanish motor vessel for transporting frozen shark and tuna from Cape Town to overseas markets. The company will export frozen tuna and shark. (The South African Shipping News and Fishing Industry Review, September 1964.)

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NEW VESSELS WILL HELP DIVERSIFY FISHERIES:

To diversify its fishing activities, a South African fisheries group ordered a series of stern trawlers, long-liners, and purse-seiners from shipyards in the Netherlands. The first deliveries arrived late in the summer of 1964 and included the 150-foot stern-trawler Pionier I; the 83-foot tuna vessels Verkenner I and Verkenner II (designed to use long lines or purse seines); and the 86-foot shoal fishing vessel Treffer I (designed mainly to use purse seines in the pilchard fishery, but also equipped to operate as a stern trawler). Delivery of the stern trawler Pionier II to South Africa was expected late in 1964.

Stern Trawlers: The stern trawlers in the Pionier series will supply a filleting and freezing plant near Cape Town which will produce frozen fillets or fish stick blocks for export. The plant is equipped with filleting machines and plate freezers. To keep that automated plant supplied with fish, the owners have invested in vessels of the most modern design. The Pionier I is capable of operating in almost any weather. Like the larger foreign trawlers working off the Cape, the Pionier I has the power, the net, and the winch to trawl down to 400 fathoms (2,400 feet). To assist in the handling of the trawl net (designed and made in west Germany from synthetic fiber), the vessel is equipped with a hydraulically-operated movable gantry.

When the net is brought up, the wings and cod-end are hauled over the stern ramp and on to the long afterdeck by the two inner drums of the winch. The cod-end is then lifted above a hydraulically-worked hatch cover, the bag is emptied, and the catch spills through the hatchway into bins in the lower deck. From those bins aft, the fish are carried forward on the starboard side to the hatches of the hold. That movement is done by conveyor where, working under cover, the crew head and gut the fish and send them through a special washing machine before feeding them through a funnel into the hold below.

Fish-hold capacity of the Pionier I is 14,330 cubic feet. The insulated hold is lined and partitioned with aluminum. It is cooled by two blower units of the vessel's gas refrigeration plant. Using that system, it is possible to keep the catch chilled at a constant temperature of 33° to 34° F. with only 0.4 tons of ice to a ton of fish.

The main engine of the 13-knot Pionier I is a 6-cylinder 4-stroke Diesel developing 900 b. hp. at 380 r.p.m. The engine acts on a 3-blade controllable-pitch propeller. The engine and the propeller pitch are controlled from the bridge. "More like a computer room than a trawler bridge," was the comment of one visitor when he saw the vessel's engine controls, electronic fish-finders, radar, automatic pilot, and other equipment.

Tuna Vessels: In late August 1964, the tuna vessels Verkenner I and Verkenner II arrived in Table Bay, South Africa, after completing delivery trips from the Netherlands. The vessels will be able to work from Cape Town, Walvis Bay, or any other harbor conveniently situated for tuna fishing. The Verkenners are identical vessels of 144 gross tons designed to fish well out to sea. Each is

South Africa Republic (Contd.):

equipped with a Diesel engine developing 435 b. hp. at 750 r.p.m and acting on a fixed 3-blade propeller. The vessels cruise at 11 knots. Accommodations are provided for a crew of 10 or 11 who may have to spend 2 weeks or more at sea. In contrast to the typical South African pilchard vessel with aft deckhouse, the new tuna vessels have their large deck structure well forward, sharply raked stem, high foredeck stepped down to a large low aftersection, and prominent crow's nest near the top of a tripod mast amidships.

The total fish-hold capacity of each of the new tuna vessels is 40 tons. Each vessel has 6 fish holds situated below hatches on the aft working deck. The holds are refrigerated by an ammonia gas system.

During fishing operations, freshly-caught tuna are placed in a hold filled with sea water cooled to just above its freezing point of 29° F. There the tuna are chilled for two days. Salt is then added to the water and the temperature reduced to 22° F. After another 2 days, the brine is pumped out and the temperature of the dry hold brought down to between 10° and 15° F. The tuna can be thawed by pumping sea water back into the hold. That may be done shortly before landing.

Soon after their arrival, the Verkenners were fitted with Japanese-type line haulers which will work 200 baskets (34 miles) of long line. When tuna are brought to the stern as the long line is hauled in, they are lifted with the aid of an electric deck winch.

If tuna schools are found in sufficient concentration to permit purse-seine fishing, each of the Verkenners can be fitted with a power block on the boom. Purse-seine gear would be worked in conjunction with a multipurpose hydraulic winch which would be placed on a base already prepared on the afterdeck.

Shoal Fishing Vessels: Similar in appearance to the Verkenners, the new seiner-trawler Treffer I has been designed to fish for pilchards with a purse-seine net during the South African shoal fishery. During the off-season for pilchards, the Treffer I will be fitted with gallows and gantry and will operate as a stern trawler.

In deciding to fit the Treffer I with a purse seine rather than a lampara seine, the owners were influenced by the success of the Brand and the Kruger with purse seines in the pilchard fishery. The Treffer I has an all-hydraulic system for handling the net. It also has a power block on the boom, and a multipurpose winch. The main engine of the vessel develops 420 b. hp. at 750 r.p.m. and acts on a controllable-pitch propeller. The vessel is equipped with an echo-sounder set to locate fish schools ahead and on either side of the vessel. It also carries a vertical echo-sounder and radar equipment. (The South African Shipping News and Fishing Industry Review, September 1964.)

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PILCHARD-MAASBANKER FISHERY, JULY 1964:

South Africa Republic: The Cape west coast pilchard-maasbanker season ended July 31, 1964, with the total catch well below that of the previous year. During 1964, fishermen were handicapped by bad weather and uncertain movements of fish schools.

The 1964 Cape west coast shoal fish catch through July 1964, when the pilchard season closed was 282,301 short tons pilchards, 22,121 tons maasbanker, 57,222 tons mackerel, and 25,709 tons anchovy. The total catch was 387,353 tons. In 1963, the catch was 441,943 tons pilchards, 12,827 tons maasbanker, and 14,634 tons mackerel, for a total of 649,404 tons. (There were no anchovy landings in January-July 1963.)

A Cape west coast pilchard and maasbanker cannery and fish reduction plant.

The shoal fish catch off the Cape west coast of South Africa Republic in July 1964 was 25,698 tons pilchards, 2,169 tons maasbanker, 1,903 tons mackerel, and 8,762 tons anchovy for a total of 38,532 tons. That compares with 64,726 tons pilchards and 35 tons maasbanker landed in July 1963.

The July 1964 catch yielded 9,184 short tons of fish meal, 426,242 imperial gallons of fish-body oil, 778,536 pounds of canned mackerel, 495,576 pounds of canned pilchards, and 228,672 pounds of canned maasbanker.

South-West Africa: At Walvis Bay in South-West Africa, the pilchard catch amounted to 499,881 tons during January-July 1964. The fishery in South-West Africa expected to continue until the 8 licensed factories had their combined catch quota of 720,000 tons.

By early September 1964, 4 of the 7 pilchard processing factories at Walvis Bay were scheduled to complete their 1964 quotas of 90,000 tons each. The three remaining factories at Walvis Bay were scheduled to finish by November.

South Africa Republic (Contd.):

No probable closing date was reported for the new factory at Luderitz. (The South African Shipping News and Fishing Industry Review, September 1964.)

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LARGE-SCALE TEST OF NEW ANCHOVY FISHERY PLANNED:

A total catch of about 21,500 short tons of anchovy was delivered between April 1-July 15, 1964, by a limited fleet of 5 or 6 vessels of the South Africa Republic. A much larger commercial test of the coastal anchovy resource is under way. About 50 vessels have been granted permission to use the special ½-inch-mesh knotless purse-seine nets needed in the anchovy fishery. The nets--costing about R8,000 (US$11,200) each--had to be imported, so the large-scale test was delayed for a brief period. But 15 of the nets had arrived by the end of July 1964 and the remainder were expected to follow in a short time. Each of the 14 fish-meal factories in the South Africa Republic was allocated 3 anchovy nets. Reports indicate that each fish-meal factory in South-West Africa was assigned one anchovy net.

The anchovy fishery of the South Africa Republic is being allowed to continue without any definite closing date (the Cape west coast pilchard fishery closed July 31, 1964); and the South-West African fish-meal factories are not subject to anchovy catch limits such as are assigned for the pilchard fishery.

The anchovy catches are being processed into fish meal and oil. The anchovy taken in mid-1964 were smaller with a lower oil content than earlier in the year. That may indicate some seasonal change in the resource. (The South African Shipping News and Fishing Industry Review, August 1964.)

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ANCHOVY FISHERY, AUGUST 1964:

Summary: The new anchovy fishery of South Africa received its first large commercial test in August 1964. Bad weather, however, made it difficult to handle the special purse-seine nets used in the fishery. (The 14 fish meal factories in the South Africa Republic have each been allocated 3 anchovy nets; the 8 fish meal factories in South-West Africa have been allocated 2 anchovy nets.) South African fishermen will continue the test of the anchovy fishery, which is not subject to catch limit or definite closing date.

South Africa Republic: With the close of the Cape pilchard season at the end of July 1964, shoal fishermen got down to the hunt for anchovy. During that month, 20 to 25 vessels took on the necessary small-mesh purse-seine nets and went after anchovy from Lambert's Bay to east of Gansbaai. They were hampered, however, by bad winter weather, and also had trouble finding shoals in sufficient concentration. The estimated catch in August was around 4,000 short tons.

By the first week in September 1964, more than 40 Cape vessels were reported to be engaged in anchovy fishing.

South-West Africa: Early anchovy fishing operations off Walvis Bay have not been very successful. This has been due mainly to bad weather and turbulent seas which have made it difficult for vessel and crew to handle the heavy gear used in the fishery.

The first anchovy net arrived in Walvis Bay during the first week of August 1964. The net was transferred to the shoal fishing vessel Marie Christine. On her first trip the vessel was able to catch only about 4 tons of very small anchovy. The fish were about 2 inches long and were very lean. They went "soft" within a few hours. As the weather improved, catches of up to 12 tons were made later in the month.

A second anchovy net was scheduled to arrive at Walvis Bay during the first week of September 1964.

Each factory at Walvis Bay is allowed to use two anchovy nets. No restriction has been placed on the size, quantity, or season in which anchovy may be caught. However, all pilchards accidentally caught in the anchovy nets will be deducted from 1965's pilchard quota for the respective factory. (The South African Shipping News and Fishing Industry Review, September 1964.)

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PRODUCERS REPORT STRONG DEMAND FOR WALVIS BAY FISHERY PRODUCTS:

The South African fishing industry would not meet its fish meal obligations in 1964 if an additional quota was not granted Walvis Bay factories in South-West Africa, according to the Chairman of the South Africa Fish Meal Producers Association. (Editor's Note: Previous reports indicated that the South-West Africa Administration had denied a requested increase of 60,000 short tons in the 1964 Walvis Bay pilchard quota.)

The Chairman emphasized that the industry had not overspeculated on its production. There were, however, two factors which had upset industry planning. First, Philippine orders for a substantial quantity of canned fish were not received until the spring of 1964. As a result, the fish used for canning left the industry short about 10,000 tons of meal. Second, adverse weather off the Cape West Coast of South Africa during May, June, and July 1964 had reduced the expected catch, and caused meal production on the Cape to fall 15,000 tons below estimates.

In late summer 1964, the Chairman of the South Africa Fish Meal Producers Association commented on export markets for Walvis Bay fishery products as follows:

Fish Meal: The market has remained very good. Japan has asked South African producers for an additional 15,000 tons of fish meal this season. That was a request, however, and not a commitment.

The Chairman said, "In the light of this year's experience, we will have to be very careful in planning production and sales for 1965 in order not to land ourselves in the predicament of not being able to meet obligations and thereby harm our prestige."

Canned Fish: Demand for South African canned fish appears to be improving, especially in the United Kingdom.

South Africa Republic (Contd.):

The 1964 contract with the Philippines was the largest canned fish contract ever concluded by the South African industry. The contract called for 437,500 cases of fish to be shipped to the Philippines by the end of August 1964. A second shipment of half a million cases of canned fish to the Philippines was scheduled to be made by the end of October 1964.

Fish Oil: The entire South African production of fish oil in 1964 has been sold to the United Kingdom. (The South African Shipping News and Fishing Industry Review, September 1964.)

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PURSE-SEINE NETS MAY REVOLUTIONIZE CAPE SHOAL FISHERY:

With few exceptions, most South African Cape shoal fishermen would rather forget the 1964 pilchard season. In seven months of often unfavorable weather, uncertain movements of pilchard schools, and other difficulties, good fishing was always just around the corner. The total catch was down and individual hauls were disappointing. But the catch was not disappointing for two skippers using purse-seine nets. Their crews not only brought in more than an average share of pilchard but also dipped well into the anchovy shoals.

The great South African pilchard fishery of the Cape and Walvis Bay has been built on the lampara seine, which is shallower than most purse seines and easier to handle.

In South Africa, the lampara seine has graduated from 50-foot to 70-foot vessels, from cotton to the strongest synthetic fibers, and from laborious hand-hauling to the swift power block. In spite of those advances, the lampara net could be on its way out and could take with it the conventional deckhouse-aft vessel.

Some advantages of the purse-seine net over the lampara net were demonstrated in 1964 by the Kruger and the Brand. Each of those 67½-foot wooden vessels was adapted for purse-seine fishing by rebuilding the upper section, moving the deckhouse far forward, and placing a power block on a boom over an aft working deck.

In November and December 1963, the converted purse-seiners Kruger and Brand were among the six Cape vessels engaged in early test fishing for anchovy, and in January 1964 they joined the hunt for pilchard. By July 31, 1964, at the end of a season in which 130 vessels (equipped mainly with lampara nets) caught an average of 2,169 tons each, the Kruger had brought in 7,700 tons (60 percent pilchards and 40 percent anchovy), and the Brand had landed 6,545 tons (80 percent pilchards and 20 percent anchovy).

Those vessels are part of the fleet still fishing for anchovy. (The South African Shipping News and Fishing Industry Review, September 1964.)

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NEW TRAWLING COMPANY BACKED BY SPANISH-SOUTH AFRICAN INTERESTS:

With a modern fleet and a factory and distribution facilities able to handle an initial 20,000 to 25,000 short tons of trawl fish a year, a new R1.5 million (US$2.1 million) fisheries company will come into operation in April 1965 on the South African Cape west coast. It will be based at Saldanha Bay.

The new trawling venture is backed by two South African companies and by a Spanish fishing concern whose distant-water trawlers have been working off the South African coast since the end of 1962.

An official of the new trawling company said it will erect a large and very modern processing factory at the shore end of what is known in Saldanha as the Government dock. There an initial fleet of six trawlers will land catches almost alongside processing facilities. A 1,000-ton cold-storage warehouse and a railway siding will also be located close to the factory. Fish handling will be reduced to a minimum by the close proximity of the dock, factory, and loading point.

The fish-processing plant of the company is being designed with emphasis on automatic handling of that portion of the catch which will be used to produce frozen fillets, fish sticks, fish blocks for processors overseas, and smoked fish. Two filleting machines will be installed in the plant.

Export sales of processed fishery products and fish meal will be made by the new company. But it will also supply chilled fish for marketing in South Africa.

Waste fish and offal from operations will be processed into fish meal. A reduction

South Africa Republic (Contd.):

plant with a capacity of 100 tons of raw fish in 24 hours has been ordered from West Germany for that work.

The Spanish-built stern trawlers which will form the fleet of the new company are 107½ feet long overall, with a gross tonnage of 218 tons. Their service speed is 12 knots. They carry a net which is handled by means of a gantry system working over a transom stern. At the forward end of the deck is a 98-horsepower electric winch, with two main drums and an auxiliary drum.

Fish hold capacity of each of the vessels is about 75 tons in 6 holds. The fish holds are insulated with a wood-cork-plastic "sandwich" layer, and are cooled by a sea water circulation system chilled to -2° C. (+28.4° F.).

It has not been decided whether the new trawling company at Saldanha Bay will acquire 6 of the stern trawlers, or whether it will take 4 stern trawlers plus 2 larger side trawlers equipped to freeze their catch at sea. The side trawlers would have an overall length of 147½ feet. Each side trawler of that type could carry 225 tons of frozen fish.

All of the vessels obtained from Spain will come fully equipped and will have a Spanish crew.

The Spanish partner in the new company at Saldanha Bay will be an active participant in the venture. But the Spanish partner will continue separate distant-water operations off South Africa using the stern and side trawlers which have become familiar callers in Table Bay Harbor. Hake caught by those vessels is shipped out in refrigerated transports for sale in Spain. (The South African News and Shipping Industry Review, August 1964.)

Note: See Commercial Fisheries Review, July 1964 p. 73.

Spain

TRAWLING OFF SOUTH AFRICA ATTRACTS MORE SPANISH VESSELS:

Following is a report from The South African Shipping News and Fishing Industry Review, August 1964, on the expansion of Spanish trawling activities off South Africa:

A leading Spanish fishing company is expanding its trawling operations off South Africa, which it began in 1962. The Spanish company is joining with South African interests on a trawling venture to be based at Saldanha Bay.

At the end of July 1964, another Spanish company was considering Cape Town, South Africa, as a base for one and possibly more trawlers.

A third Spanish company sent the 242.5-foot freezer-trawler Toula to South Africa late in the summer of 1964. The vessel's high freezing capacity--about 69 tons per day--indicates it may be intended as a mothership for other trawlers. The Toula has 8 blast-freezing tunnels, each of which can freeze about 5,800 pounds of fish in 10 hours in an air temperature of -40° F. It also has 2 plate freezers with a combined capacity of 1 ton an hour.

It has been asked how large and expensive fishing vessels working thousands of miles from their home ports can be made to pay. One answer to that question can be found in the report of an interview with a Spanish hake fisherman described as the skipper of a pair-fishing trawler operation in Northern Hemisphere waters. He said that hake was the fish people wanted and was of prime importance in the Spanish market. When sold on the Spanish market, frozen hake from South Africa probably would bring a price not far below that for fresh hake. (Editor's Note: During January-March 1964, ex-vessel prices at Vigo, Spain, averaged 38.3 U. S. cents per pound for hake and 20.0 cents per pound for small hake.)

Note: See Commercial Fisheries Review, Oct. 1964 p. 78, and Aug. 1964 p. 85.

Togo

FISHERIES TRENDS, JANUARY-OCTOBER 1964:

Togo's fishing fleet consists mainly of canoes and other small craft. Togo's domestic fisheries production is supplemented by foreign landings of frozen tuna and frozen sardines at Lome wharf. Frozen sardines are brought in almost exclusively by Soviet vessels. The foreign tuna landings are usually from Japanese or Soviet vessels. French and Spanish vessels occasionally land at Lome.

Togo (Contd.):

(A number of other foreign vessels operate off Togo, but land their catch elsewhere.) Tuna sold in Togo is usually smoked for local consumption. Sardines find ready acceptance in all but the most remote villages of Togo. Canned sardines are imported by Togo from France, but the supply still falls short of the demand. Imports of frozen fish via the Lome wharf during January 1-August 31, 1964, amounted to 3,571 metric tons.

An FAO fishery expert demonstrates gutting to fishermen because in Togo fish are usually dried without cleaning and gutting.

The Togolese Government would like to develop its own fishing industry. To that end, Togo extended its territorial waters to 12 miles during the summer of 1964. The Government of Togo plans harbor improvement work at Lome, and has accepted a West German aid project to supply Togo with two trawlers about October 1965 when the new port development has provided sufficient anchorage. To help its domestic fishermen, the Togolese Government is also considering increasing taxes on imported fish.

The Togolese Government has received about 20 requests from foreign fishing firms which would like to operate out of Lome when the harbor improvement work is completed. The requests are mainly from French and Italian nationals as well as Liberians and Ghanaians. (United States Embassy, Lome, November 20, 1964.)

Note: See Commercial Fisheries Review, Sept. 1964 p. 79; July 1964 p. 74; July 1963 p. 93; Jan. 1963 p. 118.

U.S.S.R.

STATUS OF FLEET OF LARGE STERN TRAWLERS:

The Soviet Union's fleet of large stern trawlers as of September 1964 was composed of at least 170 stern factory trawlers of 5 different classes, according to reports from various sources.

Soviet Fleet of Large Stern Trawlers by Class and Tonnage as of September 1964

Class	No. of Vessels	Gross Tons Per Vessel	Country of Construction	Date of Construction
Pushkin	24	2,470	West Germany	1956-8
Maiakovskii	86	3,170	U.S.S.R.	1958
Leskov	20	2,800	Poland	1960-64
Tropik	30	2,600	East Germany	1962-65
Kosmos	10	2,900	Poland	1963

The Maiakovskii and Kosmos class series were scheduled for continued construction throughout 1964. From 1 to 2 Maiakovskii class vessels were built each month at the Nikolaev Shipyards (on the Black Sea). Tropik class vessels, built at People's Shipyards (Volkswerft) at Stralsund (on the Baltic Sea) will continue to be built for the Soviet Union until the end of 1965, when a total of 65 vessels will have been delivered. Of that total, 22 vessels were to be delivered during 1964, and 23 will be delivered in 1965. Reports are that after 1965, East German shipyards may continue the construction of Tropiks for their own fishing fleet. (Le Marin, June 5, 1964; Nordseezeitung, various 1964 issues and other publications.)

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SOVIET FISHING VESSELS OFF NORTHEASTERN COAST OF JAPAN:

Large numbers of Soviet fishing vessels appeared off the Sanriku (Northeastern) coast of Japan in November 1964. The Soviet fish-

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

ing fleet (organized on the basis of one 2,500- to 3,000-ton class mothership to every ten 200- to 300-ton fishing vessels) was reported fishing for saury. Unlike 1963 when the Soviet vessels were observed to be test fishing with suction pumps, the great majority of the vessels in 1964 was using the Japanese method of fishing with lights and pole-held dip nets.

Later that month, a report received by the Japan Maritime Safety Second District Headquarters indicated that two 8,000-ton motherships accompanied by some 10 vessels were fishing for saury about 17 miles southeast off the Shiogama (Miyagi Prefecture) lighthouse. (Minato Shimbun, November 21; Suisancho Nippo, November 14, 1964.)

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ELECTRICAL FISHING WITH LIGHTS AND PUMPS:

Following is a description of Soviet light-and-pump-fishing methods as reported by a member of the Soviet State Committee for Fisheries and published in World Fishing, June 1964:

Caspian Sea: Soviet fishermen are using lights and pumps in the Caspian Sea to catch sprat on a commercial scale. (The method was first used in 1954 to catch Caspian sprats.) At night, bright lamps and a suction system are lowered into water where fish schools are expected to pass. The suction system is hauled aboard at dawn. When the tip emerges from the water, the lights are put out and the water is promptly pumped out of the hoses, which bob up and are pulled on board.

Lights and pumps used to fish sprat ("kilka") in the Caspian Sea off Baku. Man on left stands on the drive-shaft housing between the electric driving motor (left) and the fish pump (near his right foot). Suction hose can be seen passing under the fish box and over the railing (right rear). Man on the left is holding on to water-fish separator; fish trickle down the chute into hopper (center) while the water flows back into the sea (left rear).

At present, suction fishing in the Caspian Sea is done by large vessels fitted with 1 or 2 pumping systems. Equipped in that manner, a vessel of 700 tons displacement can catch up to 70 metric tons a night. By 1963, Soviet fishermen in the Caspian Sea were catching more fish with suction pumps than with nets (see table). In some cases, a vessel with pumps produced 2 or 3 times more than a comparable vessel fishing with nets. The use of pumps also save a lot of manual effort.

Soviet Sprat Catch in the Caspian Sea by Nets and Pumps, 1963 with Comparisons

Year	Nets	Pumps	Total
	(1,000 Metric Tons)		
1963	122.0	136.7	258.7
1962	132.7	92.0	224.7
1957	149.1	25.9	175.0
1954	91.3	0.1	91.4

Pacific Ocean: The Soviets are testing a modified pump-fishing method on saury in the Pacific. Early experiments showed that saury could evade an ordinary pump even though the fish were attracted by the lights in the suction-fishing system. It was found, however, that saury could be trapped by an electrical field. In a direct current electric field, saury instinctively move in the direction of the anode.

Those principles were used in the modified pump system designed to catch saury. The modified gear includes a fish pump and a direct current electrical unit (9 kilowatts, 30 volts, 400 amperes) to build up an electric field where saury are concentrated. Two steel pipes lowered into the water from the bow and stern of a fishing vessel serve as the cathode of the electrical system. The suction pump, with an insulated outer surface serves as the anode.

When the system is operating, saury are lured into the effective zone of the pump by a 500-watt red-light source placed 0.5 to 1.0 meters (1.6 to 3.3 feet) above the water surface and alined with the center of the suction pump under water. Direct current applied to the electrodes 5-10 seconds after the red light is put on attracts fish to the suction pump (the anode), and the pump sucks the fish in.

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

Using that method, the Yuri Gagarin (a medium trawler) took more than 50 tons of saury in 12 days. One night the catch reached 20 tons, which evidently is not the limit.
Note: See Commercial Fisheries Review, July 1964 p. 76.

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FACTORY-TYPE WHALING IN NORTH PACIFIC OCEAN:

Whaling operations in the North Pacific Ocean by the Soviet Union were described by the Director of Japan's Whale Research Institute, in an article appearing in the Japanese periodical Geiken Tsushin (Whaling Report) No. 135, July 1964. A summary translation of the article follows:

The U.S.S.R. has a long history of factory-type whaling in the North Pacific. The mothership Aleut was the only vessel engaged in that type of whaling before World War II. After the war, in addition to operating the Aleut, the U.S.S.R. established a land-based whaling station on the Kuriles. This station is still maintained and operated although there have been rumors that it would be abolished. In recent years emphasis has been placed on the expansion of pelagic whaling, and as of mid-July 1964 four factoryships were engaged in whaling in the North Pacific. In 1962, the vessel Sovietskaya Russia which had been engaged in Antarctic whaling joined the Aleut in the North Pacific operation. In 1963, two newly constructed vessels (the Dalni Vostok and the Vladivostok) were added to the fleet.

The catch of whales by the Soviet mothership fleet for 1963 included an especially large number of blue, humpback, and sperm whales during that year. A total of 9,291 whales was taken by the Soviets in the North Pacific Ocean in 1963. Of that total, 347 were blue whales, 2,242 humpback whales, and 5,125 sperm whales. At the current rate of catch blue and humpback whales will become extinct.

From 1959 to 1963, the Soviet Union expanded its whale fishery eastward. During the 1963 season it had expanded its whaling area eastward to include the entire Gulf of Alaska, with the Soviet fleet operating that year east of 130 degrees west. In addition to the expansion of the fishing area in the Gulf of Alaska in 1963, the U.S.S.R. was engaged in whaling in the North Bering Sea. Thus all waters of the North Pacific, with the exception of the Arctic Ocean are covered by the U.S.S.R. whaling fleet. (Fisheries Attache, United States Embassy, Tokyo, November 6, 1964.)
Note: See Commercial Fisheries Review, December 1964 p. 114; November 1964 p. 16; September 1964 p. 10.

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SOVIET WHALING FLEET PLANS PRESEASON HUNTING IN ANTARCTIC FOR TOOTHED SPERM WHALES:

A British periodical reported in mid-October 1964 that the Soviet joint whaling fleet of Sovietskaya Ukraina and Slava was ready to leave for the Antarctic.

The captain of the Soviet expedition said it would sail along a new route via the Suez Canal. That would make it possible to reach the whaling area two weeks earlier than usual, and to begin hunting toothed sperm whales which, according to the International Whaling Convention, can be caught at any time of the year. (Fishing News, London, October 16, 1964.)
Note: See Commercial Fisheries Review, November 1964 p. 72.

United Kingdom

FISHING LIMITS EXTENDED TO 12 MILES:

The extension of British fishing limits to 12 miles became effective September 30, 1964. At the same time, straight baselines enclosing a number of bays and channels were established by the Territorial Waters Order-in-Council of the British Government. The waters of the Scottish Hebrides Islands are the most notable area enclosed by the new baselines. English waters enclosed include Bristol Channel and The Wash.

Certain rights to continue fishing within the new British limits have been extended to fishing vessels of the foreign countries which endorsed the European Fisheries Convention. Those countries are Belgium, Denmark, France, West Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Austria, and Sweden. Fishing vessels of those countries will be allowed to fish within the British 6- to 12-mile zone, but only for the stocks and on the grounds which they have habitually fished during the 10 years ending in 1963. They will also, for an initial transitional period, be allowed to fish in areas with-

United Kingdom (Contd.):

in the 3- to 6-mile British zone where traditional rights have been established.

Along most of the British coast, foreign fishing in the 3- to 6-mile zone will end on December 31, 1965, but where straight baselines or bay-closing lines more than 10 miles in length are drawn, the transitional period extends until the end of 1966. The end of the transitional period will see foreign vessels completely excluded from the inner 6 miles of the new British 12-mile limit.

The habitual rights of the various Convention countries have been defined in a series of Designation Orders by the British Government, specifying the areas and species which the vessels of each country may fish.

Similar orders have also been made giving effect to bilateral agreements with two countries which are not parties to the European Fisheries Convention, but which have fished within the new limits. An agreement has been made with Norway giving Norwegian vessels the right to fish for dogfish and basking sharks in certain areas between 6 and 12 miles until 1984, with transitional rights between 3 and 6 miles for those fish only.

A second agreement has also been concluded giving Polish vessels the right to fish for herring between 6 and 12 miles along part of the northeast coast of England until the end of 1967. Discussions have also been held with the U.S.S.R. The Soviets, however, seem mainly interested in securing the right to enter sheltered British waters to transfer catches to motherships.

Foreign vessels fishing within British fishing limits will be subject to British fisheries jurisdiction. British conservation regulations were extended to foreign vessels within the 12-mile limit by the British Sea-Fishing Industry (Nets of British and Foreign Fishing Boats) Orders 1964, which went into effect on November 1, 1964. (Fishing News, London, October 2, 1964.)

Note: See Commercial Fisheries Review, September 1964 p. 49; May 1964 p. 40.

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CANNED SARDINE SUPPLY SITUATION:

It appears that there are no large quantities of canned sardines stored in the United Kingdom. The leading British firm producing canned sardines can accept no large orders, according to its managing director. He said that most of the current British production of canned sardines had been sold. He also indicated that there is normally little carryover of canned sardine stocks in Britain from year to year. Sprat canned in the United Kingdom is sold for export as sardines, but on the British market it is labeled brisling. Some canned brisling is also imported from Norway. Also, there are imports of canned sardines mostly from Portugal--the only fish product permitted to be sold on the British market as sardines.

Sprat are caught off the east coast of Great Britain. There is no legal limit on the British sprat season; it is controlled only by the availability of the fish in coastal waters. In general, British fishermen catch sprat from October to February off the English coast and from September to February off the Scottish coast.

The British Ministry of Agriculture, Fisheries, and Food reported total sprat landings in English and Welsh ports during 1963 of 6,163 long tons with a total ex-vessel value of £83,179 (US$232,901). That represents a rise of only 100 tons over the 1962 landings. Sprat landings in Scottish ports, however, established a record during the 1962/63 season when 30,000 long tons were landed, or 3 times as much as in any previous postwar season, according to the British Department of Agriculture and Fisheries for Scotland. It was stated that cold weather may have helped bring large schools of sprat into coastal waters during the 1962/63 Scottish season.

There are approximately 6 British plants classifiable as sardine canneries, although all of them process other types of fish and, in some cases, vegetables and other foods. To the extent possible, sprat are processed immediately after being landed. Normally, about one-half the catch is canned during the fishing season; the remainder is frozen and canned during the rest of the year. The majority of workers in British sardine canneries are women; they are paid on a piece-work basis; and their weekly average wage is about $28.00. (United States Embassy, London, November 11, 1964.)

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NEW BRITISH IMPORT SURCHARGE DOES NOT APPLY TO FISH AND FISH PREPARATIONS NOR TO CERTAIN FISHING VESSELS:

Foodstuffs and basic raw materials are not subject to the new temporary import ad valorem surcharge (15 percent) levied by the British Government as of October 27, 1964. Fish (tariff 03.01-03.03) and preparations of meat and fish (tariff 16.01-16.05) are covered by the exemption for foodstuffs.

Also excluded from the new import surcharge are fishing vessels of 80 gross tons or more (tariff 89.03A) and fishing vessels of the kind commonly known as Danish-type seiners (tariff 89.01B).

The temporary 15-percent import surcharge will be in effect until November 30, 1965, when it may be renewed for a further period of not more than 1 year. But the British Government also will review its balance-of-payments position in the spring of 1965 to determine if the surcharge can be reduced or

United Kingdom (Contd.):

abolished before November 30, 1965. (British Record, Nos. 14 and 17, November 1964.)

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JNDERWATER "SOUND WAVE SEARCHLIGHT" DEVELOPED FOR FISHERIES USE:

British scientists have developed an underwater "sound wave searchlight" with a maximum range of 100 yards. At that range, it is said to be much more effective than traditional echo-sounding equipment. The "sound wave searchlight" is said to give a more detailed picture of the underwater world.

Sound waves, which travel 5 times as fast in water as they do in air, have been used for many years in underwater detection devices. They, however, produce a fixed beam, which gives its results simply as an echo or no echo. The new "searchlight" is reported to be more of the equivalent of an underwater radar. It transmits sound at 500 kilocycles a second in pulses 100 millionths of a second in length in a beam 30 degrees across. The maximum range is 100 yards.

Echoes from the transmitted sound are "scanned" electronically across the beam at speeds up to 10,000 times a second. That means that the resolution--or how well the equipment can distinguish objects--is extremely good; something only 6 inches in length is discernible. Output from the echo signal is presented on a television-type tube so that the range and bearing of the moving "blips" can be seen easily.

Sea trials have confirmed the performance of the equipment, which is now being manufactured for commercial tests. It had previously been used in laboratory research on fish behavior. (The South African Shipping News and Fishing Industry Review, August 1964.)

Viet-Nam

INCREASE IN SHRIMP EXPORTS PLANNED:

In 1964 Viet-Nam made trial shipments of frozen shrimp for market testing in the United States, Europe, and Asiatic countries. During the year, repeat shipments of frozen shrimp amounting to some 35,000 pounds were made to Hong Kong, Japan, France, Holland, Switzerland, and the United States.

Viet-Nam's fishery products exports, including shrimp, were expected to increase with the completion of additional fish landing facilities in that country. (United States Embassy, Saigon, November 6, 1964.)

Yugoslavia

TUNA VESSELS BEING BUILT WITH AID OF FOREIGN KNOW-HOW:

Three 145-foot tuna purse seiners designed by a United States firm in Seattle, Wash., are under construction by a shipyard in Pula, Yugoslavia. Deliveries to a Yugoslavia fishing company, also of Pula, are scheduled for May, July, and September 1965.

The vessels will have a carrying capacity of 475 metric tons of tuna. Engines of 1,560 horsepower will be supplied by a Yugoslav firm which will build the engines under license from a Danish firm.

Hydraulic-powered fishing gear, including power blocks, main seine winches, and other deck machinery, will be supplied by the Seattle designing firm. (The South African Shipping News and Fishing Industry Review, September 1964.)

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CANNED FISHERY PRODUCTS OUTPUT, 1963 AND JANUARY-JUNE 1964:

In 1963, Yugoslavia produced a record 27,452 metric tons of canned fishery products,

Women at a Yugoslav cannery preparing fish for cooking in wire baskets prior to canning operations.

Yugoslavia (Contd.):

exceeding 1962 production by 8,079 tons or about 30 percent. During the first 6 months of 1964, Yugoslav output of canned fishery products reached 14,046 metric tons, only 8 percent above production in January-June 1963. That indicates the trend toward increased canned production, which started in the late 1950's, will continue, though on a more modest scale. (Savezni Zavod Za Statistiku Indeks, September 1964.)

SEA OTTER POPULATIONS MAY BE TRANSPLANTED TO MORE ACCESSIBLE SITE

Sea otters have been absent from the Alaska "Panhandle" for a half century or more but may once again occupy that eastern portion of their former habitat. From communities in the more remote parts of the Aleutian Islands, which remained untouched by hunters during the latter part of the 18th into the 19th centuries, the otter has spread again through much of its former range.

Otters are now becoming more abundant in parts of Prince William Sound in Alaska. Plans are being made by the Alaska Department of Fish and Game to help them migrate south and east from there to the Alexander Archipelago, an area consisting of numerous islands in the waters of southeastern Alaska.

An aerial and SCUBA search by biologists of the Alaska Department of Fish and Game this past April disclosed at least one area in the Panhandle where a proposed transplant of sea otters would have an excellent chance of success. According to the biologists, the proposed release site on the west side of Chichagof Island has a good supply of sea otter requirements. These requirements include food of the proper kinds, protected rocky and sandy beaches, and isolation from human activities.

The chief biologist of Alaska's Division of Game, who is in charge of transplants, said that the remaining major obstacle to a full-scale reintroduction of the otter to a new area, is the difficulty in capturing an adequate number of them within a short enough period of time so that none would have to be kept long in captivity. Sea otters depend on their thick fur for insulation, he pointed out, and when it becomes matted--as it is prone to do quickly in captivity unless elaborate and costly facilities are provided--the animals get wet to the skin and die from exposure.

The Department's biologists are trying to devise a capture method which will improve on the one-by-one, two-or-three-a-week methods which have heretofore been used. An attempt to use a "cannon net," like those used for capturing some kinds of birds, was unsuccessful when tried earlier, partly because of weather conditions.

The biologist in charge of the Alaska Division of Game's sea otter investigations said that if a promising capture method could be found reasonably soon, a small pilot transplant of the otters was to be attempted before the end of 1964. Full-scale moving of sea otters could then begin in 1965, utilizing experience and knowledge gained in the pilot transplant. The animals will be moved from Prince William Sound to Chichagof by amphibious airplane, the biologist said. (Alaska Department of Fish and Game, Juneau, May 1, 1964.)