



International

FOREIGN FISHING OFF U. S. COASTS

SOVIET AND JAPANESE ACTIVITY, FEBRUARY 1966:

Alaska: U.S.S.R.: In mid-February 1966, a total of 145 Soviet vessels were fishing in the North Pacific Ocean, the Bering Sea, and the Gulf of Alaska.

A major Soviet Pacific ocean perch fleet of about 85 vessels fished in the eastern Gulf of Alaska. The vessels were deployed along the edge of the Continental Shelf from the Canadian border at Dixon Entrance to Middleton Island west of Cape St. Elias.

A small Soviet ocean perch fleet of about 20 vessels (some of which are large BMRT factory stern trawlers) was operating in the western Gulf of Alaska. The fleet was located along the 100-fathom curve in the vicinity south of Chirikof Island.

The Soviet shrimp fishery in the Gulf of Alaska consisted of two small fleets, each involving about five medium refrigerated trawlers (SRT-M class). One fleet was fishing east of the Shumagin Islands; the second was in the area between Chirikof and the Trinity Islands south of Kodiak Island. The Soviet 1966 catch quota for Bering Sea shrimp was set at 6,000 metric tons (13.2 million pounds).

On January 28, 1966, a U. S. Coast Guard plane sighted three Soviet vessels one-half mile inside U. S. territorial waters off Alaska. They were the large freezer stern trawlers Basargin (BMRT-343) and Khingon (BMRT-488), and the processing mothership Sovetskaya Kamchatka. Their position was 54°54' N. and 133°12' W., near Cordova Bay, Prince of Wales Island in Southern Central Alaska. All three vessels were underway and subsequent investigation disclosed that they left U. S. territorial waters. No action was taken by the Coast Guard or other U. S. authorities

as it was believed that the Soviets had entered U. S. waters inadvertently.

JAPAN: Four factory stern trawlers were reportedly fishing on Albatross Bank in the western Gulf of Alaska east of the Trinity Islands. It was believed the vessels were fishing for Pacific ocean perch.

One factory stern trawler was reported fishing for ocean perch in the eastern Aleutians south of Unalaska Island.

Two factory stern trawlers were fishing in the Bering Sea north of Unalaska Island predominantly for Pacific ocean perch.

A factoryship and 6 trawlers continued to operate in the Bering Sea along the eastern Aleutian Islands, taking mainly Alaska pollock (used for minced fish meat and reduction into fish meal and oil).

The vessels were joined by a second factoryship accompanied by 11 trawlers. According to Japanese press reports, that fleet was fishing primarily for Pacific ocean perch.

Northwest Pacific Coasts: U.S.S.R.: The Soviet fishing fleet that normally operates in the Gulf of Alaska moved massively south as far as Vancouver Island, British Columbia. By mid-February, almost 100 Soviet vessels (mostly medium side trawlers and large stern trawlers supported by refrigerated fish carriers) fished on the west side of Vancouver Island from Dixon Entrance to Queen Charlotte Sound. It seems that Soviet exploratory vessels which have been working off and on the British Columbia's coast discovered large concentrations of ocean perch.

For a short while two Soviet large stern trawlers (Kazakhstan--BMRT-387 and Sevkomorski Komsomolets--BMRT-429) and a medium side trawler (SRTM--8410) fished 20-50 miles west of Cape Flattery, Wash. By mid-February, however, they had rejoined

International (Contd.):

The main Soviet fishing fleet off British Columbia.

A solitary Soviet refrigerated transport sighted off Californian coast in mid-February 1966 was on a return journey to her home port of Vladivostok with frozen whale meat from the Soviet Antarctic Expedition.

Northwest Atlantic: U.S.S.R.: A total of 77 Soviet fishing vessels were sighted off the North Atlantic coast in mid-February 1966 of which 66 were identified as 36 factory stern trawlers, 4 processing and refrigerated freezer trawlers, 19 medium trawlers, 3 refrigerated transports, one processing and refrigerated factory base ship, one tanker, one tug and one hydrographic research vessel.

Of the 36 large factory stern trawlers, 7 were sighted southern Georges Bank. Heavy catches, (one trawl contained an estimated 30,000 to 40,000 pounds of fish) appeared to be mostly black mixed with small amounts of whiting.

The remaining Soviet vessels were concentrated in two large groups. The first, consisting of about 35 vessels, located 30-40 miles SSE of Nantucket Island, was fishing mainly for whiting with incidental catches of hake. The second group of fishing vessels, consisting of about 30 vessels and operating 60 miles SSE of Block Island, also fished for whiting and red hake.

The U.S.S.R. hydrographic research vessel sighted does not normally operate with the fishing fleet as it does research for the Soviet Navy. However, it did refuel from a tanker operating with the fishing fleet.

In order to observe foreign fishing activities in the North Atlantic, the staff of the Fisheries Resource Management Office, Department of the Interior's Bureau of Commercial Fisheries, Gloucester, Mass., has been conducting reconnaissance flights cooperatively with the U. S. Coast Guard.

On January 20, 1966, a Soviet trawler (Perekop, RT-221) requested permission from the U. S. Coast Guard to enter U. S. territorial waters for emergency repairs. Perekop (with a cable fouled in the propeller of the vessel) was towed near Provincetown, Mass., by a Soviet salvage tug (the Megushchii). A boarding party consisting

of U. S. Coast Guard, Navy, Customs, and Bureau of Commercial Fisheries personnel went aboard. The boarding party had no interpreter.

Gulf of Mexico and Caribbean: JAPAN: It is thought that the Japanese are long-lining for tuna in this area. It is believed that approximately 20 vessels are so engaged delivering fish to St. Martin, Netherlands Antilles.

U.S.S.R.: In an article published in the St. Petersburg Times, Congressman Paul Rogers of Florida reported on his discussions with Soviet fishery scientists during his visit to the Soviet Union. The Soviets "admitted that they have an ocean research vessel operating in the Gulf of Mexico. The vessel shows Cuban fishing fleets where to fish."

According to a December 1965 article in World Fishing, the U.S.S.R. maintains at Havana 2 fishery research vessels. They engage in an extensive fishery research program which benefits the Cubans at present, but which may be used by the Soviets once the Havana fishing port is completed (July 1966). The Soviet Union also contributes the services of 10 fishery scientists who are stationed in Cuba.

Note: See Commercial Fisheries Review, Mar. 1966 p. 17 and p. 27. (Summaries of foreign fishing activity off U. S. coasts formerly were reported in the section of Commercial Fisheries Review on "Trends and Developments," usually under the sub-headings: "Alaska" and "North Atlantic.")

EUROPEAN FISHERY EXHIBITIONS

RECENT AND FUTURE FISHERY TRADE FAIRS:

In Europe, international fairs or exhibitions are a well accepted and successful means of publicizing and marketing industrial and food products. International fishery fairs have become a part of this picture in the last decade and are increasing in number.

Sales prospects by exhibitors at European fishery fairs are not limited to Western European countries since representatives of developed and developing countries in Asia and Africa usually are in attendance. East Bloc countries both attend and exhibit. Poland has exhibited its line of fishing vessels at international fisheries fairs for a number of years, and East Germany has begun exhibiting refrigerating and reduction machinery.

International (Contd.):

Recent Fishery Fairs: Following is a brief listing of recent European fishery exhibitions:

meal and oil for feeding animals, worth \$167 million. Peru ranked third in the world, behind Japan and Canada, in fishery export earnings; it also imported 800 tons of fish worth \$573,000.

Exhibition	Attendance		Exhibitors	
	Persons	Countries	Individual Exhibitors	Countries Represented
..... (Number)				
Third International Fishery Trade Fair-- Goteborg, Sweden, Nov. 1965	1/	1/	186	10
Second Official Fisheries Fair--Trondheim, Norway, Aug. 19-29, 1965	78,000	1/	185	8
World Fishing Exhibition--London, England, May 27-June 2, 1965	2/20,000	1/	200	12
Fifth International Fisheries Trade Fair-- Copenhagen, Denmark, Sept. 11-20, 1964	37,000	1/	200	14
World Fishing Exhibition--London, England, May 27-31, 1963	2/13,000	92	200	17
Fourth International Fisheries Trade Fair-- Copenhagen, Denmark, April 14-23, 1962	55,000	39	230	14

1/Data not available.

2/Attendance was restricted to those with fishery interests--general public was excluded.

Future Fairs: Fishery exhibitions planned in the future include: (1) the Fisheries Fair, Ostende, Belgium, Mar. 19-27, 1966; (2) the Biennial International Exposition of Fishing, Lorient, France, May 12-22, 1966; (3) the 6th International Fisheries Trade Fair, Copenhagen, Denmark, May 12-21, 1967; (4) the World Fishing Exhibition, London, England, May-June 1967; and (5) the Third Official Fisheries Fair, Norway, 1970. (Regional Fisheries Attache, United States Embassy, Copenhagen, December 15, 1965.)

Note: See Commercial Fisheries Review, Nov. 1965 p. 69, Sept. 1965 p. 79, May 1965 p. 52, and Dec. 1964 p. 91.

FOOD AND AGRICULTURE ORGANIZATION

SOUTH AMERICA EXPORTS
MORE FISH IN 1964:

The nations and territories of South America conducted international trade in fish and fish products totaling 1,777,000 metric tons worth US\$208 million in 1964, according to the Food and Agriculture Organization of the United Nations.

South America's fishery imports were 72,000 tons worth \$27 million. In 1963 the Continent's international fish exports amounted to 1,351,000 tons worth \$154.5 million; imports were 67,000 tons worth \$26.5 million.

The bulk of South America's international fish trade was Peru's 1,574,700 tons of exports, and the great majority of that was fish

Next in the South American group came Chile, with exports of 168,000 tons worth \$22 million. Chile imported \$62,000 worth of fishery products. Complete 1964 figures for Bolivia, Paraguay, and Venezuela were not available.

International fish trade figures for the other South American countries were:

Argentina--exported 3,400 tons worth \$570,000 and imported 4,600 tons worth \$1.1 million.

Brazil--exported 1,800 tons worth \$2.8 million, imported 26,300 tons worth \$14.6 million.

British Guiana--exported 3,100 tons worth \$4.1 million, and imported 3,200 tons worth \$1.5 million.

Colombia--exported 600 tons worth \$1 million and imported 10,600 tons worth \$1.1 million.

Ecuador--exported 8,100 tons worth \$3.5 million and imported 200 tons worth \$94,000.

French Guiana--exported 100 tons worth \$89,000 and imported 200 tons worth \$176,000.

Surinam--exported 800 tons worth \$886,000 and imported 1,500 tons worth \$700,000.

International (Contd.):

Uruguay--exported 800 tons worth \$114,000
 imported 900 tons worth \$533,000. (FAO,
 Bulletin of Fishery Statistics, No. 8, Fishery
 Commodities, 1964.)

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WORLD FISHERY TRADE IN 1964 ESTABLISHES RECORD:

International imports of fish and fish prod-
 ucts reached a new high of US\$1,963 million
 in 1964, the latest year for which statistics
 are available, according to the Food and Ag-
 riculture Organization (FAO) of the United
 Nations. Exports were valued at \$1,739 mil-
 lion.

FAO warns, however, that its trade fig-
 ures represent statistics forwarded to the
 organization by only 145 nations, about 88
 percent of those engaged in commercial fish-
 eries. No trade figures were available for
 mainland China.

About 41 percent of the 1964 record world
 catch of 51.6 million metric tons went
 in international trade in one form or another.
 The percentage for the 1963 world catch of
 44.1 million tons was 37 percent.

The \$1,963 million value of international
 fishery imports was \$259 million above the
 1963 value of \$1,704 million. Exports
 in 1964 were valued at \$1,739 million, or
 \$35 million more than in 1963.

The leading nation in fishery export earn-
 ings was Japan, selling abroad 573,000 tons
 worth \$248 million. Top fish importing
 nation was the United States, buying 976,000
 tons worth \$488 million.

The volume of international trade--on a
 weight basis--in fish and fish products,
 compared with the total world catch, has
 increased steadily since World War II. In
 1954 it was 20 percent, compared with 27 per-
 cent in 1954; it topped 32 percent, or about
 one-third of the world catch in 1960.

Some 68 percent, or above 35 million met-
 ric tons, of the 1964 catch was used for hu-
 man consumption and was marketed fresh,
 frozen, cured or canned. About 32 percent,
 or above 16 million metric tons, was used
 in reduction to fish meal or oils for feeding
 animals.

About one-third of the 1964 catch (17 mil-
 lion tons) was marketed fresh. Some 16 per-
 cent, or above 8 million tons, was sold cured--
 smoked, salted, dried, etc. Frozen fishery
 products accounted for almost 10 percent
 (about five million tons) and canned fish prod-
 ucts for over 8 percent (4.4 million tons).

Canada, second to Japan, exported 351,000
 tons worth \$184 million. In third place came
 Peru, for the past three years the world's
 top fish-catching nation, with 1,575,000 tons
 of exports worth \$166 million. Peru's ex-
 ports are mostly fish meal.

Fourth came Norway with 462,000 tons
 worth \$156 million. Denmark and her Faroe
 Islands ranked fifth, with exports of 388,000
 tons worth \$118 million.

The only other nation to earn above \$100
 million was Iceland, with 402,000 tons worth
 \$101 million.

Other nations exporting more than \$25
 million worth of fish and fish products were:
 South Africa and Southwest Africa--401,000
 tons worth \$74 million; Netherlands--206,000
 tons worth \$57 million; United States--114,000
 tons worth \$56 million; Mexico--41,000 tons
 worth \$51 million; U.S.S.R.--99,000 tons
 worth \$44 million (estimated); Portugal--
 106,000 tons worth \$49 million; Spain--77,000
 tons worth \$35 million; Morocco--87,000 tons
 worth \$34 million; Federal Republic of Ger-
 many--81,000 tons worth \$31 million; Swe-
 den--242,000 tons worth \$26 million; and
 United Kingdom--53,000 tons worth \$26 mil-
 lion.

Second largest fish importer was the Uni-
 ted Kingdom with 710,000 tons worth \$275
 million, followed by the Federal Republic of
 Germany, 796,000 tons worth \$158 million;
 and France 320,000 tons worth \$123 million.

Other Nations importing above \$25 million
 worth were: Italy--258,000 tons worth \$93
 million; Japan--188,000 tons worth \$70 mil-
 lion; Netherlands--299,000 tons worth \$61
 million; Belgium and Luxembourg--189,000
 tons worth \$53 million; Sweden--139,000 tons
 worth \$49 million; Denmark and Faroe Islands--
 212,000 tons worth \$33 million; Hong Kong--
 69,000 tons worth \$32 million; U.S.S.R.--
 101,300 tons worth \$28 million; Australia--
 46,700 tons worth \$27 million; Switzerland--
 62,400 tons worth \$26 million. (FAO Bulletin

International (Contd.):

of Fishery Statistics, No. 8, Fishery Commodities, 1964.)

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FOOD IRRADIATION SYMPOSIUM CALLED:

An International Symposium on Food Irradiation will convene June 6-10, 1966, in Karlsruhe, West Germany. It is sponsored by the International Atomic Energy Agency and the Food and Agriculture Organization. Purpose of the meeting is to review the present status of food irradiation and assess its potential. Fish and seafoods are included. (United States Embassy, Vienna, January 12, 1966.)

INTERNATIONAL PACIFIC HALIBUT COMMISSION

NORTH PACIFIC HALIBUT REGULATIONS FOR 1966:

Fishing for halibut will begin May 9, 1966, at 6 p.m. Pacific Standard Time in the most important North Pacific areas (Areas 1, 2, and 3A), eight days later than in 1965, according to the recommendations of the International Pacific Halibut Commission to the Governments of the United States and Canada for the 1966 fishing season. The proposed 1966 regulations contain important changes from 1965. Among them are new designations for former areas 3B North to 4A and 4B; 3B Northeast to 4C, 4E, and part of 4D; and 3B Northwest to 4D West of 175° W. longitude.

The openings and closings of the various regulatory areas will be 6 p.m. Pacific Standard Time in Areas 1, 2, 3A, and 3B. In all other areas the opening will be at 3 p.m. and the closing at 6 p.m. local time.

Fishing areas in 1966 shall be: Area 1--south of Willapa Bay, Washington; Area 2--between Willapa Bay and Cape Spencer, Alaska; Area 3A--between Cape Spencer and the Shumagin Islands; Area 3B--the Shumagin Islands to Atka Island, not including the Bering Sea; Area 3C--west of Atka Island, not including the Bering Sea; Area 4A--the Bering Sea edge, Unimak Pass to the Pribilof Islands; Area 4B--Fox Islands grounds, Bering Sea; Area 4C--between the Pribilof Islands and 175° W. longitude; Area 4D--east of 175° W. longitude and north of a line between St. Paul Island and Cape Newenham and waters of the Bering Sea west of 175° W. longitude; and Area 4E--the flats east of Area 4A and south of the Cape Newenham line.

In Area 1, the fishing season, without catch limit, shall end at the same time as that in Area 2. (In 1965 Area 1 was closed on September 15, the date on which Area 2 closed.)

In Area 2 the fishing season shall end when the catch limit of 23 million pounds has been reached or on October 15, whichever is earlier. (The limit is the same as in 1965 and 2 million pounds less than the quota of 25 million pounds in 1964. The catch limit in Area 2 in 1965 was attained by September 15 when the season closed.)

In Area 3A the fishing season shall end when a catch limit of 33 million pounds is reached or on October 15, whichever is earlier. (The limit is 1 million pounds less than in 1965 when it was attained on August 26 and the season was closed.)

In Area 3B the fishing season opened first on April 18 for 10 days and again on May 9 and will close when the catch limit of 3.5 million pounds is reached (including the amount taken during the first season of 10 days) or on November 15, whichever is earlier. (In 1965 the closing date for approximately this same area--Area 3B south--was September 30 when the catch limit of 4 million pounds was attained.) In Area 3C the fishing season without catch limit, opened on March 25 and will close on November 15.

In Area 4A the fishing season opened for 9 days commencing on April 6 and ending on April 15, without catch limit. In Area 4B the fishing season shall be open for 9 days beginning on September 1 and ending on September 10, without catch limit. In Area 4C and 4E the fishing season opened on March 25 for 87 days ending on June 20, without catch limit. In Area 4D the fishing season opened on March 25 and will close on November 15, without catch limit.

There shall be no retention of halibut caught incidentally to fishing for other species in any area closed to halibut fishing.

In 1966 the Commission will provide 10 days' notice of closure of Areas 1 and 2; and 18 days' notice of closure of Area 3A; and at least 18 days' notice of closure of Area 3B.

The Commission's recommendations for the 1966 season were announced on February 4 at the conclusion of its 42nd annual meeting at Seattle, Wash., with Chairman William M. Sprules of Ottawa, Ontario, Canada, presiding.

International (Contd.):

The Halibut Commission, under authority of a Convention between the United States and Canada, investigates and regulates the halibut fishery of the northern Pacific Ocean and Bering Sea. Its function is the development of the halibut stocks to levels that will permit the maximum sustained yield. Its decisions regarding regulation of the fishery are required to be based on scientific findings.

A public session was held on February 1 at which time the 1965 fishery and the research conducted by the scientific staff were reviewed. On February 3, a meeting was held with the Conference Board, which consists of representatives of fishermen's unions and vessel owners, and with representatives of dealer organizations, at which time the Commission received various industry proposals for regulation of the fishery in 1966.

During executive sessions, the Commission dealt with administrative matters and approved a research program for 1966 continuing the 1965 program of tagging and assessment of the possible effects that foreign fishing may have upon the halibut stocks.

The Commission announced that the 1967 annual meeting will be held in Seattle, Wash. The date was not specified. Haakon M. Selvar, Seattle, Wash., was elected chairman, and William M. Sprules, vice chairman for the ensuing year.

Since in the past the United States and Canadian Governments have accepted the recommendations of the Commission without change, it is assumed that the 1966 regulations will likewise be approved as recommended.

See Commercial Fisheries Review, April 1965 p. 43.

INTERNATIONAL PACIFIC SALMON FISHERIES COMMISSION

REGULATIONS FOR 1966 SOCKEYE AND PINK SALMON IN NORTH PACIFIC:

The tentative regulatory recommendations for control of the 1966 sockeye and pink salmon fishery in North Pacific Convention waters submitted to the fishing industry on December 17, 1965, were reconsidered on the basis of suggestions made by the Advisory Committee at a meeting of the International

Pacific Salmon Fisheries Commission on January 14, 1966.

Action taken by the Commission in view of the Committee's representations:

1. The closure to all net fishing in both Canadian and United States Convention waters lying westerly of the Angeles Point-William Head line originally recommended to be "June 26 to August 6" was changed to read "June 26 to July 30."
2. No change was made in the previously established policy of the Commission on opening and closing hours for fishing in any of the Convention waters. If found to be practical on the basis of further study, consideration will be given during the fishing season regarding the weekly opening date in Canadian Convention waters to prevent movement of large numbers of gill-net boats from one fishing area to another.
3. In the Point Roberts area of United States Convention waters the Lily Point closure line was made effective for one week only commencing September 4 instead of the originally recommended two-week period commencing on the same date. The Iwersen dock line will be in effect from September 11 to October 1.
4. The Commission agreed that the conservation of sockeye would not be impaired by the use of spring salmon nets during the June 26-July 9 closure in United States Convention waters lying easterly of Angeles Point.

In finalizing its regulatory recommendations for the 1966 season the Commission emphasizes that there will be a need as in past years for adjusting fishing time during the season to provide for variation in the expected number of fishing boats, to meet individual racial escapement requirements, to reach parity in the catch by each country, and to allow adequate harvest of each major run. Notice of each regulatory change made during the fishing season will be given as far in advance as possible.

CANADIAN CONVENTION WATERS:

Area 20:

- | | |
|-----------------------------|---|
| June 26 to July 30 | - Closed to all net fishing. |
| July 31 to September 3 | - Purse seines open daily 6:00 a.m. to 6:00 p.m. Monday and Tuesday of each week. |
| | - Gill nets open daily 6:00 p.m. to 6:00 a.m. Monday afternoon to Wednesday morning of each week. |
| September 4 to September 10 | - Purse seines open daily 7:00 a.m. to 7:00 p.m. Monday and Tuesday. |
| | - Gill nets open daily 7:00 p.m. to 7:00 a.m. Monday afternoon to Wednesday morning. |
| September 11 | - Relinquish control. |

International (Contd.):

Areas 17, 18, 19 and District No. I:

- June 26 to August 6 - Open 8:00 a.m. Monday to 8:00 a.m. Wednesday of each week.
- August 7 to August 20 - Open 8:00 a.m. Monday to 8:00 a.m. Tuesday of each week.
- August 21 to September 3 - Open 8:00 a.m. Monday to 8:00 a.m. Tuesday of each week only in those waters of District No. I lying easterly of the Brunswick Cannery-Oak Street Bridge boundary.
- September 4 to September 10 - Open 8:00 a.m. Monday to 8:00 a.m. Tuesday.
- September 11 to September 17 - Open 8:00 a.m. Monday to 8:00 a.m. Tuesday only in those waters of District No. I lying easterly of the Brunswick Cannery-Oak Street Bridge boundary.
- September 18 to September 24 - Closed to all net fishing.
- September 25 to October 8 - Open 8:00 a.m. Monday to 8:00 a.m. Tuesday of each week.
- October 9 - Relinquish control.

Special Troll Restrictions:

Fishing for sockeye or pink salmon other than by angling or trolling for the purpose of personal consumption and not for sale or barter shall be prohibited in these Convention waters of Canada (the waters of Howe Sound excepted), lying easterly and inside of a straight line projected from Gower Point at the westerly entrance to Howe Sound to Thrasher Rock light, thence in a straight line to Salamanca Point on the southerly end of Galiano Island, thence in a straight line to East Point on Saturna Island, thence in a straight line towards Point Roberts light to the intersection with the international boundary line, thence following the international boundary line to its intersection with the mainland from the 21st day of August to the 8th day of October, both dates inclusive, except at the times that net fishing other than with spring salmon nets may be permitted within that area.

UNITED STATES CONVENTION WATERS:

West of Angeles Point-William Head line and East of Bonilla-Tatoosh line:

- June 26 to July 30 - Closed to all net fishing.

- July 31 to August 6 - Gill nets open daily 7:00 p.m. to 9:00 a.m. Monday afternoon to Wednesday morning.
- Purse seines open daily 5:00 a.m. to 9:00 p.m. Monday and Tuesday.
- August 7 to September 10 - Gill nets open daily 7:00 p.m. to 9:00 a.m. Sunday afternoon to Tuesday morning of each week.
- Purse seines open daily 5:00 a.m. to 9:00 p.m. Monday and Tuesday of each week.
- September 11 - Relinquish control.

East of Angeles Point-William Head line:

- June 26 to July 9 - Closed to all net fishing except with nets having a mesh of not less than 8½ inches extension measure and under regulation by the Washington State Director of Fisheries.
- July 10 to August 6 - Gill nets open daily 7:00 p.m. to 9:00 a.m. Monday afternoon to Wednesday morning of each week.
- Purse seines and reef nets open daily 5:00 a.m. to 9:00 p.m. Monday and Tuesday of each week.
- August 7 to October 1 - Gill nets open daily 7:00 p.m. to 9:00 a.m. Sunday afternoon to Tuesday morning of each week.
- Purse seines and reef nets open daily 5:00 a.m. to 9:00 p.m. Monday and Tuesday of each week.
- September 4 to September 10 - Waters lying westerly of a straight line projected true south from Lily Point to the intersection with the international boundary line will be closed to all net fishing.
- September 11 to October 1 - Waters lying northerly and westerly of a line from Iwersen's dock on Point Roberts to Georgina light at Active Pass will be closed to all net fishing.
- October 2 - Relinquish control.

Notes: (1) Times are based on Pacific Daylight Saving Time.
(2) See Commercial Fisheries Review, April 1965 p. 45.

International (Contd.):

LAW OF THE SEA

CONVENTION ON FISHING AND CONSERVATION OF THE LIVING RESOURCES OF THE HIGH SEAS RATIFIED BY MEXICO:

On December 20, 1965, Mexico became the first country to ratify the Convention on Fishing and Conservation of the Living Resources of the High Seas. Twenty-two ratifications or accessions are needed for the Convention to enter into force.

The Convention has provisions which for the first time recognize the special interests of the coastal nations in maintaining the productivity of the high-seas resources adjacent to their territorial sea. On the other hand, the Convention sets forth standards which should discourage irresponsible action by coastal states seeking to extend their jurisdiction under the guise of conservation. This Convention is one of the four adopted at Geneva, April 29, 1958, by the United Nations Conference on the Law of the Sea. The other three Conventions (the Territorial Sea and the Contiguous Zone, the High Seas, and the Continental Shelf) have entered into force. Those Conventions were also ratified by Mexico on December 20, 1965.

NORTHWEST PACIFIC FISHERIES COMMISSION

MEETING, FEB. 25-MAR. 25, 1966:

The International Northwest Pacific Fisheries Commission (Soviet Union and Japan) met in the Soviet Union, February 25-March 1, 1966. This year's meeting, originally scheduled to open on March 1, was moved up to avoid overlap with the Soviet Communist Party Congress scheduled to open in Moscow on March 25. The Commission sets the annual Soviet and Japanese catch quotas for salmon, herring, and crabs in the Northwest Pacific Ocean.

The pact between the two countries, originally entered into in 1956, is due to expire at the end of 1966. The Japanese were concerned that the Soviets wished to discuss at this meeting, in addition to the catch quotas, the revision of the treaty and the Convention. To this the Japanese objected. They favored talks on treaty revision to be held separately from those held to set catch quotas.

The agenda proposed by the Soviet Union at the meeting did not, as has been the usual

practice, include a suggested date for the 1967 meeting. This has led to the belief in Japan that the Soviets intended to tie-in discussions on treaty revision with the quota negotiations. At this year's meeting the Soviets were expected to make a strong demand for a drastic cut in the Japanese salmon catch.

At any discussions on revision of the treaty the Japanese expected to raise a number of points which they consider especially disadvantageous to themselves. Some of these points are: (1) since the treaty covers only fishing operations on the high seas, the catch quotas affect only the Japanese; (2) restrictions are imposed not only on the Japanese catch but also on fishing areas, vessels, and gear; (3) the Commission's authority is too broad. (Various Japanese press items.)



Argentina

GOVERNMENT REQUESTS JAPANESE HELP IN MAKING FISHERY MARKETING SURVEY:

Argentina approached Japanese fishery officials in January 1966 and requested that a Japanese fishery team undertake a marketing survey in Argentina. The survey would be aimed at supporting Argentina's policy of developing a strong export trade in fishery products. (Suisancho Nippo, January 20, 1966.)

JAPANESE-ARGENTINE JOINT FIRM PLANS TO PROCESS AGAR-AGAR:

A Japanese industrial firm and an Argentine firm are reported to be planning to establish a joint agar-agar processing company in Chubut Province in southwest Argentina in May or June 1966. The Japanese firm is to contribute 49 percent and the Argentine firm 51 percent of the total capital investment. In addition to manufacturing agar-agar, the joint company is expected to export to Japan seaweed harvested along the Argentine Bay of Bustamante. The Japanese Government was expected to give approval for the joint venture in Argentina. (Suisan Keizai Shimbun, December 24, 1965.)



Barbados

STATUS OF TUNA FISHERY, 1965:

Fishing for tuna and tuna-like species is carried out all year round within a radius of 35 miles around the island of Barbados. The principal method of fishing for this species is by trolling and drift fishing with lines--mainly single hook using live bait. The entire fishing fleet of over 400 vessels indulges in this fishery. The local type fishing vessel is 20-30 feet overall length and powered by 10-35 horsepower inboard diesel engines. No program for constructing tuna vessels is envisaged. The catch is sold fresh or placed in cold storage.

No biological or technological research is being conducted on tuna by Government or other installations. (United States Consulate General, Barbados, February 3, 1966.)



Canada

NEW HERRING REDUCTION PLANT FOR EAST COAST:

Plans for a new herring reduction plant in New Brunswick with a potential processing capacity of 15 short tons of herring an hour or 360 tons a day were announced in December 1965 by the New Brunswick Fisheries Minister. The new East Coast plant is to be set up in Lower Caraquet, New Brunswick, by a British Columbia firm and may be in operation by April 1966. The scale of initial operations will depend on the availability of herring.

At present, New Brunswick is using only about 4 percent of the potential herring harvest in the Gulf of St. Lawrence, according to some biologists. The new plant could extend the herring fishing season and create a market for herring on a continuing basis. New Brunswick fishermen now catch herring close to shore in the spring and fall with conventional gill nets. To test fishing farther offshore, the New Brunswick Department of Fisheries plans to charter the 80-foot steel herring seiner Quoddy Bay which can follow the herring migration when the fish move out to deep water in the summer. Other large herring vessels may operate in the area if the purse-seining by the Quoddy Bay proves successful. (Canadian Fisherman, January 1966, and other sources.)

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FEDERAL-PROVINCIAL DEVELOPMENT PROGRAM FOR FISHERIES IN NEWFOUNDLAND AND LABRADOR:

A substantial program for joint fisheries development projects in 1966 was announced January 19, 1966, by the Canadian Federal Fisheries Minister and the Newfoundland Minister of Fisheries.

The program, which is being carried out by the Newfoundland Fisheries Development Authority and the Industrial Development Service of the Federal Department of Fisheries, will be directed to a variety of operations to speed up the fisheries development of Newfoundland and Labrador. The projects it provides for will involve (1) the construction of a number of combination-type vessels, (2) demonstration of new and improved gear and equipment, and (3) the introduction of fishery techniques not presently used in Newfoundland. Several technical specialists will be made available to provide fishermen with the know-how essential to more efficient operations.

One of the most important projects is the development of a type of multipurpose fishing vessel on which a start was made in 1965. This is part of a program to introduce more efficient vessels to the Newfoundland fleet. The new vessels will be used for experimentation and demonstration on inshore and near-offshore grounds. They will make diversified operations possible by using the same vessels for dragging, seining, long-lining, gill-netting, and other methods. With larger and more mobile vessels, operators should be able to catch fish throughout most of the year, over an extended area, and utilize more species.

In announcing the new program, the Ministers stated that some projects will be carried out on a 50-50 basis, while for others, the Federal Government will meet 75 percent of the cost and the Provincial Government 25 percent, depending upon the nature of the undertaking. In several projects there will also be financial participation by the fishing industry. Technical assistance will be provided at Federal cost, and on an increasing scale, with specialists drawn not only from Newfoundland but from other areas of Canada and countries such as the United States, Great Britain, Norway, and Japan.

In describing some of the projects for 1966, the joint statement said that last year a survey was made by Scottish fishing skippers to

Canada (Contd.):

see if it would be feasible to introduce to the Newfoundland fisheries the Scottish version of seine netting for cod and other groundfish. This year some local Newfoundland vessels will be converted to Scottish seine netting. The Federal Department of Fisheries is trying to charter a Scottish seine-net vessel with its regular crew to demonstrate the method in Newfoundland.

There will be an exploratory fishing program in areas which hold promise for shrimp, since it is felt that this species could provide a profitable operation for many fishermen.

Squid fishery activities are to be expanded in 1966. Tremendous schools of squid move into the shallow waters off Newfoundland in the summer, but the traditional fishing season is relatively short, and from time to time the squid fail to show up, with resulting distress to fishermen. Squid are not only an export item but are the cod fishermen's first choice for bait. This year's squid project will lay emphasis on the catching of squid in deeper waters, and if successful will result in a longer squid season.

Snap-gear long-lining, a method used successfully on the Pacific Coast, is also to be introduced to Newfoundland. This gear is more versatile, more easily set and hauled, and more easily maintained than the long lines now in use in the Atlantic.

The Ministers also referred to the herring fishery, stating that it will play an ever-increasing role in the development of Canada's Atlantic fisheries. With large stocks of herring available and a growing market for that fish, not only for meal and oil but also for human consumption, a determined effort is being made to establish a pattern for year-round exploitation.

The introduction of synthetic materials in the making of cod traps is a project of interest to Newfoundland fishermen. The Icelandic method of cod seining is another. On-the-spot studies of this method were made last year and it is thought that it could have application to the Newfoundland cod fishery.

The Federal and Provincial governments, in cooperation with Memorial University, have completed a survey of the Labrador fishery in order to determine the best approach

to its commercial development. Although the full report is not yet available, provision has been made for this historically important fishing area to benefit from the current program. (Canadian Department of Fisheries, Ottawa, January 19, 1966.)

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BRITISH COLUMBIA LANDINGS, 1965:

A record silver salmon catch of 36.7 million pounds and a top price of 40 cents a pound for halibut highlighted the annual 1965 British Columbia catch statistics issued by the Canadian Department of Fisheries in Vancouver, B. C. The total ex-vessel value of all fish landings for the Province in 1965 totaled C\$47.4 million down \$900,000 from 1964.

Salmon landings were down sharply, totaling 95 million pounds. That was second only to the alltime low of 1960. The British Columbia salmon pack for 1965 amounted to 913,000 cases compared to 1,255,000 cases in 1964.

In spite of the overall low level of salmon landings, British Columbia fishermen took a record high silver salmon catch of 36.7 million pounds worth C\$11.1 million ex-vessel. The previous high was in 1951 when fishermen landed 35.2 million pounds.

The total landings of sockeye in 1965 were 16.2 million pounds worth C\$6 million; in 1964 they were 23 million pounds valued at C\$8.3 million.

The catch of king salmon in 1965 was 12.7 million pounds valued at C\$5.3 million.

For pink salmon, the total production was 23 million pounds worth C\$2.7 million as compared to the cycle year of 1963 which produced 60.1 million pounds worth C\$6.1 million.

The total production of chum salmon in 1965 was the lowest of any year on record, totaling only 6.7 million pounds worth C\$824,000. The previous low was in 1961 when fishermen brought in 14.6 million pounds. The total ex-vessel value of all salmon landed in the Province was C\$26 million in 1965 as compared to C\$30.2 million in 1964. In spite of the overall drop in salmon production in 1965, the trollers had an alltime record year because of the record silver catch.

The landings of halibut increased sharply during 1965 and coupled with record high prices,

Canada (Contd.):

yielded alltime high ex-vessel returns C\$11.1 million. The average price during the season was 33.7 cents a pound with the high reaching 40 cents a pound at both Prince Rupert and Vancouver. British Columbia fishermen landed 33 million pounds of halibut at both Canadian and United States ports.

The value of herring increased slightly during 1965 because of higher prices to the fishermen. Total herring production during 1965 was 222,000 short tons with a value of C\$6.23 million as compared to 252,000 tons in 1964 worth C\$6.17 million.

For other species, the highlight was landings of grey cod, totaling 19.2 million pounds worth C\$1.1 million as compared to 12 million pounds in 1964 worth C\$720,000.

Crab production was down, totaling 3.5 million pounds in 1965 worth C\$552,000 as compared to 4.35 million pounds worth C\$699,000 in 1964.

The production of oysters showed a slight drop, totaling 151,000 shucked U. S. gallons worth C\$612,000 as compared to 154,000 shucked U. S. gallons worth C\$588,000 in 1964.

The production of shrimp was up sharply although still not a record year, with a volume of 1.76 million pounds, worth C\$281,000 as compared to 1.05 million pounds worth C\$161,000 in 1964. (Canadian Department of Fisheries, Vancouver, January 28, 1966.)

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NEW LICENSING SYSTEM FOR BRITISH COLUMBIA FISHERMEN AND VESSELS:

Details of a new system of licensing fishermen and fishing vessels on the Pacific coast were announced January 25, 1966, by the Canadian Minister of Fisheries. The new system went into effect April 1, 1966.

Under the new system, a personal fishing license costing C\$5 annually will be required for all wishing to engage in commercial fishing operations in British Columbia. The license is available from any office of the Department of Fisheries in British Columbia.

In addition, all vessels engaged in any commercial fishing operation are to be registered

at Pacific Area headquarters of the Department of Fisheries of Canada in Vancouver. The annual cost of registration is C\$10 and commercial fishing license plates will be issued. Applications for vessel registration are to be available from all Fisheries offices in the Province.

Any vessel participating in the salmon fishery will be required to obtain an additional license for which a fee of C\$5 will be charged in 1966. This year, the salmon license fee will not be based on the size of a vessel as proposed earlier. A meeting of Canadian Federal officials with representatives of British Columbia's fishing industry was scheduled in February 1966 to consider further steps which may be taken to control fishing effort in the salmon fishery. (Canadian Department of Fisheries, January 25, 1966.)



Chile

FISH MEAL INDUSTRY, 1965, AND FUTURE PROSPECTS:

By all accounts 1965 was a disastrous year for the fish meal industry in northern Chile. With the return of the anchovy to the northern coast in the second week of December, however, the prolonged period of resource famine (extending more than 20 months) showed promise of ending. Preliminary figures for December show a catch of 94,000 tons--the highest for any month since February 1964--which was accomplished despite strikes (which kept most vessels idled until December 8 and 16 in Iquique and Arica respectively), the year-end holidays, and a reduced operational fleet (due to lack of maintenance during the months the purse seiners remained in port). The December catch raises the total for the year to about 415,000 tons (the lowest annual figure since 1961) but more importantly offers new hope for a return to normalcy in the new year. Some observers are predicting that Chile will export 150,000 tons of fish meal in 1966.

The extent to which the fish return and to which the industry responds to the opportunity thus presented will also be significant factors affecting the future control and operation of the industry. During the past year, Chile's Corporación de Fomento de la Producción (CORFO), a Government planning agency, has

Chile (Contd.):

come under increasing pressures from many directions to institute a comprehensive program to rationalize the industry and revitalize the economy which it largely supports. Through October CORFO measures were directed principally at curtailing expansion of the fish meal industry and sustaining a minimum level of economic activity through various ad hoc measures (e.g. loans, public works projects). Additionally, a new fisheries bill, designed to provide payment in part of export bonuses in arrears and to ease plant mergers and moves was introduced in the Congress. This bill was approved nearly 1966 by the Lower House and was passed on to the Senate.

As it became increasingly evident that the fish were not returning, pressures on CORFO to take stronger action grew more intense, and at the year's end, the Development Corporation announced that plans had been concluded to reorganize and restructure several of the plants (especially in Iquique) with increased financial assistance from CORFO accompanied by direct Government participation in both ownership and management.

The lessons so clearly imparted during the prolonged resource shortage were: (a) the Chilean fish meal industry was overextended, overconcentrated, and overspecialized; and (b) an export-oriented industry must operate efficiently if it is to meet competition in the world market. Additionally, the period of hardship demonstrated that some plants were able to rationalize operations beyond prior expectations. (United States Embassy, Santiago, January 26, 1966.)



Cuba

HAVANA FISHING PORT TO OPEN SOON:

Havana fishing port will be finished on or about July 26, 1966, to celebrate the Cuban revolutionary holiday, according to Cuban sources. Built at a cost of 30 million pesos (US\$30 million), the Havana port will accommodate 130 medium (250-600 gross tons) Cuban and Soviet fishing vessels.

CUBAN FISHING VESSEL UNDER SOVIET MASTER:

The 60-gross-ton Cuban fishing vessel Perca F-0-7006 arrived at Progreso (Yuca-

tan Peninsula, Mexico) to put ashore a sick Cuban crewman. The crewman was transferred to the Perca from his own vessel, the Victoria I, at Isla Mujeres.

The Master of the Perca is a Russian national; however, the First Officer and Chief Engineer are Cuban nationals. The Perca carries a crew of 31. (U. S. Consulate, Merida, December 17, 1965.)

Editor's Note: The Victoria class of vessels is being built in Victoria de Giron Shipyards at Cardenas. Six of these 180-gross-ton vessels, the largest of domestically-built Cuban fishing vessels, are being constructed.



Denmark

FISH MEAL, OIL, AND SOLUBLES PRODUCTION, 1964-1965; EXPORT TRENDS, DECEMBER 1965:

In 1965, Denmark produced 114,297 metric tons of fish meal, 40,364 tons of fish oil, and 16,774 tons of fish solubles. In 1964, output was 113,391 tons of fish meal, 34,772 tons of fish oil, and 11,841 tons of fish solubles.

In December 1965, Denmark exported 5,063 tons of fish meal including 4,615 tons of herring meal and 448 tons of other fish meal. The leading buyers were the United Kingdom with 1,414 tons, Hungary with 680 tons, Spain with 580 tons, and Poland with 500 tons. Most of the remainder went to West Germany, Switzerland, Sweden, and the Netherlands. Danish exports of fish solubles in December 1965 totaled 1,468 tons, almost all of which went to West Germany. (Regional Fisheries Attache, United States Embassy, Copenhagen, February 4, 1966.)

MINIMUM POND TROUT PRICES ASKED:

In late 1965, it was thought that Danish pond trout prices might be stabilized after a lengthy, declining, and erratic market if the Danish Fisheries Ministry could establish and police minimum export prices as requested by the Danish trout producers and exporters. Nearly all of Denmark's 20-million-pound annual production of pond trout is exported.

Denmark (Contd.):

EEL STUDIES IN THE SARGASSO SEA:

Eel eggs and sexually mature spawning eels are to be sought in the Sargasso Sea (between Bermuda and Puerto Rico) by Danish scientists during a 4-months expedition which left Copenhagen on the research vessel Dana, January 4, 1966. A Danish scientist found eel larvae there in 1913, but neither eggs nor mature eels were ever discovered in the area. Danish biologists believe European eels stop eating and swim 2,500-3,000 miles to the Sargasso Sea to spawn. Since experiments have indicated that eels spawn at about 68° F., the search will begin at the depth where that temperature occurs. Pelagic trawls, echo-sounders, ASDIC, and other sophisticated equipment will be used.

Other scientists aboard will sample water for radioactivity and measure the depth to which sunlight penetrates in the great deeps.



El Salvador

FOREIGN FISHING VESSELS PERMITTED TO ENTER EL SALVADOR PORTS:

Foreign fishing vessels are permitted to enter El Salvador ports if necessary due to adverse weather conditions, according to an official in the Fisheries Section of the Ministry of Economy. Permission to offload catch would be handled on a case by case basis similar to treatment permitted by U. S. Bureau of Customs regulations. (U. S. Embassy, San Salvador, February 4, 1966.)



Faroe Islands

LANDINGS AND EXPORTS AT RECORD LEVEL IN 1965:

In 1965 Faroese fishermen landed 144,000 metric tons of fish, surpassing 1962's record total by 500 tons. Faroese exports of fishery products reached a new record value of 172 million kroner (about US\$24,940,000). Salted cod and herring prices were higher and fillet production about doubled. A Faroese vessel caught 40 tons of Atlantic salmon off West Greenland in gill nets. Faroese purse seiners landed North Sea herring in Denmark. The average daily income of fishermen on

vessels increased about 25 percent from 1964 levels to \$9.57.



India

STANDARDS FOR SHRIMP EXPORTS:

Compulsory quality controls of frozen and canned shrimp for export have been introduced by the Indian Government.

India's new shrimp standards are part of a larger inspection system covering other exports and is under the control of the Central Ministry of Commerce (Export Act). It is directed by the Central Institute of Fisheries Technology.

Before putting the quality control program into effect, a great deal of investigation and research was carried out. Health authorities in interested importing countries were consulted as to their requirements. Standards of quality and packaging were set up. A careful system of tests and methods of sampling were devised.

The quality control program began functioning on a voluntary basis in 1964 with participation by most of the major elements of the industry. After a trial period in which various problems of operation were solved, the Central Government of India declared the program compulsory early in 1965.

Before making a shipment, a packer must notify the Institute at least 12 hours before loading. The laboratory sends trained samplers to the warehouse where random samples are drawn based on the size of the proposed shipment.

Packers are required to code-mark all export production so a careful check can be made on all lots sampled. Samples are taken to the nearest laboratory of the Institute, where the testing is carried out.

Tests are always on an organoleptic basis and conform to the requirements of the Indian Standards.

If it appears necessary, or is requested by the packer, bacteriological tests are carried out. After the tests are completed and approved, an Inspection Certificate giving the pertinent details is issued and must be submitted to the

India (Contd.):

Indian Customs before export shipment can be made.

The rapidly expanding shrimp industry of the west coast of India, numbering over 30 plants, is lending full support to the quality-control program, realizing that a reputation for a high-grade product cannot help but improve markets and export earnings. (Fish Trades Review, December 1965.)



Israel

TUNA FISHING ACTIVITY IN THE ATLANTIC:

Israel has one 500-ton tuna vessel operating in the Atlantic. Fishing in southern waters with long-line gear, the vessel lands 60-800 tons of tuna annually in South Africa where it is transshipped to Israel. The catch averages from 50 to 75 percent yellowfin, from 20 to 40 percent bluefin tuna, and about 10 percent big-eyed. (United States Embassy, Tel Aviv, January 19, 1966.)



Japan

FROZEN TUNA MARKET PRICE HIGH IN JANUARY 1966:

The export price of Japanese frozen albacore tuna continued to rise and reached a new high in January 1966 of \$450 a short ton delivered to Puerto Rico and \$460 per ton c.f. delivered to California. In November 1965 U. S. buyers had been offering \$425 a ton c.i.f. for that same species.

Dressed yellowfin tuna deliveries to Italy in January 1966 were quoted at a high of \$525-530 a metric ton c.&f. as compared with \$490-495 a ton in mid-December 1965. Frozen round albacore tuna exported to that country was quoted at \$500 a metric ton c.&f., about \$25 a ton below the yellowfin price.

The ex-vessel albacore tuna price in Japan as of mid-January 1966 was reported to be 155-160 yen a kilogram (\$391-403 a short ton).

The Japanese trade was speculating as to the future trend and it was generally believed

that the frozen albacore price would rise to \$500 delivered to California. This was based on the U. S. canners' requirements for more raw material to meet the demand for the Lenten period, February 23 through April 8, 1966. Some Japanese believed that U. S. canners, especially "private label" packers, might not purchase additional albacore and that the price would level off. However, most Japanese traders felt that the demand would be so strong as to force the price to continue up, especially since a price increase had been noted in the price of the canned product in the United States. (Suisan Tsushin, January 10, 1966, Katsuo-Maguro Tsushin, January 14, 1966, and other sources.)

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FROZEN TUNA EXPORTS TO U. S. AND PUERTO RICO, NOVEMBER 1965:

Japan's exports of frozen tuna to the United States and Puerto Rico in November 1965 were down markedly as compared with exports in the month of October. There was a drop of 58 percent in quantity and 65 percent in value.

Japan's Exports of Frozen Tuna by Species to the United States and Puerto Rico, Nov. 1965 and Oct. 1965				
Species	November		October	
	Qty.	Value	Qty.	Value
	Short Tons	US\$ 1,000	Short Tons	US\$ 1,000
Albacore:				
United States . .	539	175	2,593	905
Puerto Rico . . .	1,096	351	2,734	893
Total	1,635	526	5,327	1,798
Yellowfin:				
United States . .	290	94	1,587	566
Puerto Rico . . .	135	28	750	218
Total	425	122	2,337	784
Big-eyed:				
United States . .	-	-	9	2
Puerto Rico . . .	-	-	34	7
Total	-	-	43	9
Skipjack:				
United States . .	-	-	-	-
Puerto Rico . . .	1,127	156	-	-
Total	1,127	156	-	-
Other:				
United States . .	-	-	-	-
Puerto Rico . . .	73	15	-	-
Total	73	15	-	-
Total United States	829	269	4,189	1,473
Total Puerto Rico	2,431	550	3,518	1,118
Grand total	3,260	819	7,707	2,591

Source: Japan's Bureau of Customs.

Japan (Contd.):

Shipments of skipjack and "other tuna" to Puerto Rico were made for the first time in several months. (Fisheries Attache, United States Embassy, Tokyo, January 19, 1966.)

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CANNED TUNA IN BRINE EXPORT MARKET, JANUARY-FEBRUARY 1966:

February 1966: The Japanese Government (as a result of the failure of tuna packers and exporters to renegotiate a new export agreement) extended by 1 month, to February 28, 1966, the 2-month interim export validation procedure instituted by the Government in December 1965 to permit canned tuna in brine exports to the United States, pending conclusion of a new export agreement. The Government's action was based on the provisions of the Trade Control Ordinance, which permits it to invoke an interim export validation procedure in the absence of an exporters' agreement.

Type of Tuna Pack	New Price	Increase Over Jan. Price	Increase Over Nov. 1965 Price
Can & Case Size: (US\$/Case)		
<u>Whitemeat:</u>			
7-oz. 48's	10.50	0.30	1.60
13-oz. 24's	9.70	0.30	1.50
4-lb. 6's	10.90	0.35	1.10
<u>Lightmeat:</u>			
7-oz. 48's	8.95	0.30	1.80
13-oz. 24's	8.60	0.25	1.95
4-lb. 6's	9.45	0.40	1.00

For February, the Government authorized for export to the United States a total of 300,000 cases of canned tuna in brine, of which 210,000 cases were allocated to exporters as merit quota (based on past performance) and 90,000 cases as adjustment quota. At the same time, the Japan Canned Tuna Sales Company, which handles sales to exporters, announced the third increase in export prices since December 1965, ranging from 25-40 U. S. cents a case.

The Sales Company as of early February 1966 had available for export a total of about 656,000 cases of tuna in brine, consisting of 588,000 cases of whitemeat and 68,000 cases of lightmeat. After the February sale, the Company was expected to have in stock only whitemeat tuna in cases of 48 7-oz. cans. (Suisan Tsushin, February 1, 5, & 7, 1966, and other sources.)

January 1966: The Japan Canned Tuna Sales Company planned to offer for the January 1966 sale a total of 320,000 cases of canned tuna in brine for export to the United States. This quantity was the remainder of the 500,000 cases of canned tuna authorized earlier by the Japanese Government for export during December 1965-January 1966, pending conclusion of a new exporters agreement (old agreement expired November 10, 1965). In December 1965, a total of 180,000 cases were sold to exporters.

For the January sale, the Sales Company announced a price increase of 50 cents a case for both whitemeat and lightmeat tuna packed in 7-oz. cans (48 cans per case) to \$10.20 and \$8.65 a case respectively, f.o.b. This was the second price increase in two months. In December 1965 the Sales Company raised prices an average of 70 cents a case for whitemeat tuna and 20 cents a case for lightmeat tuna. (Katsuo-Maguro Tsushin, January 14, 1966.)

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EXPORTERS' VIEWS ON PACKERS' PROPOSAL TO CHANGE CANNED TUNA EXPORT POLICY:

The Japan Tuna Packers Association, following a meeting held February 7, 1966, announced its intention to approve the export of canned tuna in oil to the United States and of canned tuna in brine to Europe. At present, Japanese canned tuna exports to the United States are limited to tuna packed in brine. Exports to Europe are limited to oil-packed tuna.

Concerning this proposed change in policy, Japanese trading firms were reported to hold these views:

(1) Exporters have been wanting to export canned tuna in oil to the United States and therefore welcome this proposal. However, in view of the 35-percent ad valorem duty assessed by the United States on canned tuna in oil imports, it is inconceivable that the proposed export approval would immediately result in volume sales of that product to the United States. In fact, it is possible that no sales will be made for a while, and even in the future no hope can be held for large shipments. If any at all, chunk-style canned skipjack tuna appears to hold some promise, but even that product would be difficult to export unless the ex-vessel price of skipjack in Japan drops considerably.

Japan (Contd.):

(2) Assuming B-grade canned tuna in brine could again be packed in large quantities, exporting that product to Europe would be preferable to exporting it to the United States. The trading firms therefore support the Association's proposal, but believe it will likely take a long time to establish in Europe a market for canned tuna in brine such as that which exists in the United States. (Suisan Tsushin, February 10, 1966.)

Under the U. S. Tariff Act, canned tuna in brine imports in excess of 20 percent of the U. S. domestic pack of canned tuna in the preceding year are dutiable at the lower rate of 12 1/2 percent ad valorem. Imports in excess of that quota are dutiable at 25 percent ad valorem. A 35-percent duty is levied on imports of canned tuna packed in oil.

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TUNA LANDINGS IN YAIZU, JAPAN, JANUARY 1966 AND YEAR 1965:

January 1966 fish landings at the Japanese port of Yaizu (principal tuna port) totaled 8,778 metric tons, an increase of 997 tons over the same period in 1965.

February 7, 1966, Suisancho Nippo, January 8, 1966.)

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TUNA MOTHERSHIP-TYPE PURSE-SEINE TEST FISHING OFF WEST AFRICA:

The Japanese mothership-type purse-seine test fishing in the Atlantic off West Africa in 1965 was far from satisfactory, according to the Managing Director of the firm conducting the operation. However, he said ". . . but we plan to expand our operations in 1966." He made the statement after he returned from an inspection trip to the Atlantic. According to the Managing Director, a pair of 2-boat purse-seiners (90 gross tons each) will be dispatched to join the firm's Atlantic fleet, led by the 1,600-ton mothership Chichibu Maru and including the 145-ton pair-boat purse-seiners Kuroshio Maru Nos. 81 & 82.

In 1965, the Chichibu Maru fleet landed 4,000 metric tons of fish, consisting of 45 percent skipjack tuna, 35 percent yellowfin tuna, and 20 percent bonito. (Note: Earlier

Landings in Yaizu, Japan, January 1966 with Comparisons

Species	January 1966		January 1965		December 1965		December 1964	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Metric Tons	US\$1,000	Metric Tons	US\$1,000	Metric Tons	US\$1,000	Metric Tons	US\$1,000
Bfin	5,677	3,128	5,025	2,278	7,345	3,942	7,016	3,394
Alcore	703	303	540	194	995	391	822	270
Sjack	717	180	328	69	1,478	344	1,852	373
Mkerel	222	35	481	80	-	-	-	-
Cons	759	203	707	157	2,253	362	1,072	265
Total	8,078	3,849	7,081	2,778	12,071	5,039	10,762	4,302

Fish landings at Yaizu, in December 1965 totaled 12,071 metric tons valued at 1,814 million yen (US\$5.04 million), according to data published by the Yaizu Fishery Cooperative Association. This was 54 percent more in quantity and 84 percent more in value than landings in November 1965, which totaled 7,653 metric tons valued at 987 million yen (US\$1.74 million). Compared to December 1964, landings in December 1965 were up 12 percent in quantity and 17 percent in value.

January-December 1965 fish landings at Yaizu were 149,168 metric tons valued at \$9.2 million, compared with 147,353 metric tons valued at \$42.6 million in 1964. By species, the quantities landed in 1965 were: Bfin 63,416 metric tons; albacore 30,396 tons; skipjack 31,485 tons; mackerel 14,927 tons; others 8,944 tons. (Kanzume Nippo,

reports indicated the catch consisted of 50 percent yellowfin, 40 percent skipjack, and 10 percent miscellaneous species.) The Managing Director stated the rapid current flow and depth of the thermocline (about 160 feet) created problems in setting on fish but the firm hoped to overcome those conditions by enlarging the mesh size of the purse seine and by making other modifications. (Shin Suisan Shimibun Sokuho, January 19, 1966.)

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GOVERNMENT-INDUSTRY REPORT ON ASSESSMENT OF TUNA RESOURCES:

The Japanese Government, after meeting with the tuna industry on January 27, 1966, released a report entitled, "Assessment of the Current Tuna Fishery and Direction of Countermeasures." The report consolidates the views of Government and industry officials exchanged at five earlier discussion meetings aimed at seeking ways and means of helping

Japan (Contd.):

should positively assume the position of leadership in the movements aimed at international management of the resources

Japan (Contd.):

In late November 1965, the Chiyoda Maru explored the waters off New Zealand, where her catches consisted primarily of Spanish mackerel. The expedition has not proven the feasibility of establishing a commercially profitable trawl fishery in the Antarctic waters. (Shin Suisan Shimbun Sokuho, January 19, 1966.)

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FISHERIES AGENCY BUDGET
FOR FY 1966:

The Japanese Cabinet on January 14 approved a general account budget for fiscal year 1966 (Apr. 1966-Mar. 1967) for submission to the Diet (parliament), which convenes in late January. Funds requested for the Fisheries Agency, Ministry of Agriculture and Forestry, total 24,200 million yen (US\$67.2 million), an increase of 4,002 million yen (\$11.1 million) or about 20 percent over 1965's regular fishery budget of 20,198 million yen (\$56.1 million). The proposed increase in the fishery budget is considerably higher than any past increases approved by the Cabinet.

Program	FY 1966 Budget		FY 1965 Budget	
	1,000 Yen	US\$	1,000 Yen	US\$
Improvement of vessel gear and shipboard medical services	38,000	105,556	-	-
Improvement in weather and fishing forecasts	29,000	80,556	24,000	66,667
Resource conservation (incl. water pollution control)	482,000	1,339,000	473,000	1,314,000
Measures to improve marketing of fishery products	351,000	975,000	252,000	700,000
Sea-farming development surveys	19,000	52,778	12,000	33,333

New programs in the FY 1966 fishery budget include, among others, extension of a \$14,000 Government subsidy to improve medical services aboard fishing vessels engaged in high-seas fisheries, \$83,000 for installation of labor-saving devices aboard the 602-ton Government research vessel Shoyo Maru, and \$7,000 for long-line gear research. The proposed budget also includes a large increase in funds for the promotion of frozen fishery products on the Japanese domestic market and a request for additional funds for sea-farm development projects. (Suisan Keizai

Shimbun, January 17; Minato Shimbun, January 15, 1966.)

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CONSTRUCTION OF UNDERWATER
RESEARCH VESSEL PLANNED:

The Japan Science and Technology Agency is planning to build an underwater research craft over a 3-year period at a total cost of 300 million yen (US\$833,333). The Agency hoped to begin working closely in April 1966 with other concerned agencies on vessel design and other construction details. The proposed 50-foot craft, to be provided with space for 4 persons (including 2 scientists), will be equipped to conduct underwater explorations to a maximum depth of 1,500 meters (4,920 feet). In terms of benefits to the fisheries, the research craft is expected to contribute knowledge heretofore unobtainable on the ecology, behavior, distribution, and migration of deep-water fish, and on oceanographic conditions. (Suisan Keizai Shimbun, January 21, 1966.)

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RATIFICATION OF TWO
GENEVA CONVENTIONS EXPECTED:

The Japanese Foreign Ministry and the Fisheries Agency were planning on presenting to the Diet, which convened in late January 1966, bills on ratification of two conventions adopted at the 1958 Geneva United Nations Law of the Sea Conference. The two are: Convention of the Territorial Sea and the Contiguous Zone; and Convention on the High Seas. This move to seek ratification of the two Conventions marks a new departure in Japan's fishery policy in that, until recently, Japan had strictly adhered to the principle of the three-mile territorial sea limit and the principle of freedom of the seas. However, as a result of the most recent development wherein Japan accepted the principles of the Geneva Conventions in defining fishery zones in the Japan-Republic of Korea fishery agreement (which took effect following ratification of the treaty to normalize relations between the two countries), it is reported that the Japanese Government decided to defend Japan's rights on the seas in the future on the basis of the principles embodied in the two conventions. (Japan Economic Journal, January 18, 1966.)



Republic of Korea

SHIPBUILDING MISSION FROM JAPAN VISITS KOREA:

The Cooperative Association of Japan Shipbuilders was scheduled in January 1966, to lead a mission of some 15 shipbuilding technicians to South Korea for talks on Japan's cooperation in building fishing vessels under the treaty of economic cooperation recently concluded by the two countries.

The Japanese Association is a group of shipbuilders of small and medium size vessels. The mission, comprising experts of major member companies of the Association, was scheduled to stay in Korea for about 2 weeks to exchange views with Korean officials and leaders of the fishing industry on technical and business matters. (The Japan Economic Journal, Vol. 4, No. 159, January 11, 1966.)



Mexico

SHRIMP EXPORTS, 1965:

Mexican exports of shrimp in 1965 fell slightly below 1964, according to preliminary figures released by the Mexican Department of Statistics of the Secretariat of Industry and Commerce.

The 1965 value of shrimp exports was \$44,112,000, down 1.7 percent from the 1964 figure of \$44,880,000, which in turn was down slightly from 1963. The above are Customs valuations. Re-evaluated figures of the Bank of Mexico, which reflect changes in actual market prices, show 1963 exports at \$51.7 million and 1964 at \$53.5 million. Prices continued high throughout most of 1965, and when re-evaluated figures are available they will probably show that 1965's somewhat lower quantity of exports will have about the same value as in 1964.

Shrimp constituted Mexico's fifth most important export in 1965, behind the perennial leaders--cotton, coffee, and sugar--and for the first time behind corn which was in second place. (U. S. Embassy, Mexico, D.F., Feb. 11, 1966.)



Morocco

ATLANTIC TUNA FISHERIES:

With the exception of tuna caught in the "madragues," or fixed nets, off the northwest coast of Morocco, and the canneries dependent on that catch, the local tuna catch is made by sardine boats and packed as a sideline by the sardine canneries. Since the local tuna industry is an offshoot of the much larger sardine industry, it is difficult to obtain precise information on the number and types of vessels used and areas where the fish are caught.

In the five "madragues" located offshore near Larache (two), Mehdia, Acila, and Tangier, bluefin tuna (*Thunnus thynnus*) are caught during May, June, and July. In 1964, a total of 4,700 tons of mainly bluefin were caught in the "madragues." This catch is sometimes not included in official Moroccan fishing statistics. Other varieties of tuna and tuna-like fish in Moroccan waters (such as bonito, frigate mackerel, swordfish, skipjack tuna, and some bluefin tuna) are caught in small quantities up to 50 miles off the coast from Tangier south to Agadir during the months of June through November. Most of those varieties are caught by sardine vessels using purse seines, but some of the larger fish are caught by hand lines from smaller boats. It is estimated that up to 50 sardine vessels in the 30- to 50-ton class engage in tuna fishing at some time during any given season either when sardines are not available or when the tuna are particularly in evidence. As far as is known there are no plans to build or buy any tuna vessels.

There are six canneries located in Tangier (two), Larache (three), and Kenitra which can process tuna exclusively, mainly from the "madragues" with additional supplies trucked in from the southern ports, and 61 other canneries located in Mohamedia, Casablanca, El Jadida, Safi, Essouira, and Agadir which pack tuna as well as their main product sardines. During the 1964/65 season the 67 canneries packed 212,000 cases of tuna (about 39 lbs. per case). During the same season Moroccan canneries packed over 2.3 million cases of sardines and other fish. The capacity for tuna could thus be easily expanded if the supply warranted it since most plants can tuna only as a sideline.

Since the end of the Danguy charter in September 1965, there have been no significant research projects on tuna carried out by

Morocco (Contd.):

either the Government or private industry. The experience of the small Agadir vessels which fished off West Africa in 1965 reemphasized the fact long known to the local industry that larger more modern vessels are needed if the local fishermen are going to venture far from their own shores. (United States Embassy, Rabat, January 28, 1966.)

**Norway****HERRING FACTORYSHIP TO OPERATE IN 1966:**

A Norwegian whaling vessel will be converted to operate as a floating herring factory in 1966. The vessel will operate in the Skagerrak Sea, North Sea, or adjacent waters according to the supply of herring. The Norwegian herring catch in the North Sea increased greatly in 1965. Plans to build herring plants in southern Norway have also been discussed. At present, herring vessels working in the more southern waters must travel a considerable distance to deliver to factories in west Norway.

**Peru****PERUVIAN FISH MEAL INDUSTRY TRENDS IN 1965, AND FUTURE PROSPECTS FOR 1966:**

Peruvian production of fish meal in 1965 dropped to 1,282,011 metric tons, compared to 1,522,214 tons in the record year of 1964. The smaller production was due largely to a drop in the catch of anchovy estimated at about 8 million metric tons in 1965 as against 8.86 million tons in 1964. The amount of fish meal exported by Peru in 1965 was 1,259,417 tons, a decrease of 157,124 tons from 1964.

The Government of Peru has adopted conservation measures. A catch quota has been set of 7 million metric tons of anchovy for use in fish meal for the current open season, October 1, 1965-June 30, 1966. No anchovy fishing for the fish meal industry will be permitted in July, August, and September 1966. The opening of the next season has been set as October 1, 1966, but the closing date is to be selected later and is to be based on recommendations by the Peruvian Instituto del Mar.

Future prospects for the anchovy resource the basis for the Peruvian fish meal industry are giving cause for concern. September-December catches in 1965 showed as high as 60 percent immature anchovy, indicating the possibility of a reduced spawning stock associated with spawning season.

It is probable that the annual anchovy catch has reached its peak with the record year of 1964, and, typical of other commercial fisheries may now begin to stabilize or decline, depending upon the effectiveness of conservation measures.

The reduced catch in 1965 resulted in serious economic hardship for some small fish meal firms operating with little reserve capital and heavily mortgaged equipment. Control of the industry by early 1966 appeared to be settling in the hands of a few large firms.

In addition to resource and economic problems, the industry faced political problems. Peruvian fishermen on a countrywide basis were threatening strikes if they did not obtain satisfaction on salaries, social advantages, and better working conditions. This could mean a minimum cost of US\$15.00 more per ton for Peruvian fish meal. Production of fish meal in January 1966 was estimated at about 210,000 tons maximum, or, about the same as in December 1965. U. S. buyers in late January 1966 were paying US\$183 per ton for February/March deliveries and US\$186 per ton for April/June deliveries. At the January rate of buying, U. S. buyers would have absorbed a minimum of 25,000 to 30,000 tons per month of Peruvian fish meal production for the period February through June.

Considering resource, economic, and political problems now being experienced by the Peruvian fish meal industry, the result could be higher world prices for fish meal and oil in 1966. It might be said, "As Peru goes, so goes the world fish meal market." (Various sources)

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FISH OIL EXPORTS, JANUARY-SEPTEMBER 1964-1965:

Peruvian fish oil exports in the first 9 months of 1965 were 122,266 tons with a value of \$20.4 million, as compared with 90,531 tons valued at only \$11.3 million in the same period of 1964. (United States Embassy, Lima, January 9, 1966.)

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FISHING LICENSES FOR FOREIGN FLAG VESSELS:

The period of license validity for foreign vessels fishing for Peruvian companies was liberalized by Supreme Decree No. 16, dated December 28, 1965. Under the terms of the decree, licenses for such vessels will be valid to the end of the calendar year in which they are purchased. (U. S. Embassy, Lima, Peru, January 6, 1966.)



Fishery

RECENT FISHERY DEVELOPMENTS:

Fishing Areas and Catches: Like other European maritime nations, Poland has greatly expanded her marine fisheries. In 1964, her marine fishery landings were 244,000 metric tons, or three times as much as a decade ago. In the first half of 1965, landings amounted to 121,200 metric tons, but reportedly creached 280,000 tons by the end of the year (preliminary estimate). Most of the marine landings do not come from the Baltic Seas as they did in the first 15 years after World War II. In 1964, the Baltic contributed about 80,000 tons of fish to the Polish catch; over 40 percent came from the North Sea (102,000 tons). The other two major Polish fishing grounds have been the Northwest Atlantic (almost 40,000 tons in 1964) and the coast off Northwest Africa (15,000 tons). It was in those two areas that Polish fishing expanded most rapidly in recent years.

In the Northwest Atlantic Fisheries Convention (ICNAF) area, the Poles began to fish in 1951, mostly off the Canadian coast. On Georges Bank, fishing was limited in 1964; only 20 tons of fish were landed by one vessel. However, in August 1965, three Polish eastern trawlers (all newly built in 1964) began to fish on Georges Bank along with 2 Romanian stern trawlers. It may be expected that the Poles will expand their fishing operations on Georges Bank, and will probably follow the Soviet expansion into the Southern Atlantic and eventually into the Indian Ocean.

Polish Fishing Fleet: Poland ranks third in world construction of fishing vessels by tonnage (behind Japan and Sweden). Most new construction goes for export. Poland has been a major supplier of fishing

vessels to the Soviet Union, and in the last few years she began to export her fishing vessels also to France, United Kingdom, and other Western nations.

In January 1965, the Polish fishing fleet numbered about 700 motorized vessels, most of them small cutters (550 units). The rest consisted of large factory stern trawlers (10), factory freezer trawlers (10), medium trawlers (15), steam-powered trawlers (54), side trawlers (44), base ships (2), and supply ships (1). All factory and freezer stern trawlers were added in 1963 and 1964.

Plans for the Future: Poland has ambitious plans for the development of her distant fisheries. The landings are to double by 1970 (to 450,000 tons) mainly due to construction of about 35 large freezer and factory trawlers, 3 motherships, and 2 refrigerator vessels. Catches in the Baltic and North Sea will increase somewhat (to 100,000 and 120,000 tons), but the largest portion of the increased catch will come from the North and Central Atlantic (160,000 and 70,000 tons). Long-term plans provide for another doubling of the catch to 900,000 tons by 1980.

State Versus Private Enterprises: The Polish fishing industry consists of state, private, and cooperative enterprises. The state-owned and controlled fishing enterprises almost doubled their catch from 1961 to 1964 (see table 1), while private fishermen in 1964

Table 1 - Poland's Fishery Landings by Enterprises, 1961 and 1964

Fishery Enterprises	Quantity	
	1964	1961
	(1,000 Metric Tons)	
State enterprises	211.0	132.0
Cooperative enterprises	21.0	19.0
Private enterprises	21.0	18.0
Total Landings	244.0	169.0

Source: Polish Maritime News

landed less than 5 percent of the total catch. Government support in investments, research, modern equipment, and fishermen's training contributed to the rapid growth of state-owned enterprise fishing at the expense of private and cooperative enterprises.

Fishery Trade: Both Polish fishery exports and imports doubled from 1960-1964 (table 2). The most significant trends in imports are continuous increases in fish meal imports and the decline of salted herring imports from the Soviet Union. The entire increase in Polish fishery exports was due to the newly developed markets for fresh and

Poland (Contd.):

Table 2 - Poland's Fishery Trade, 1960 and 1964

	1964	1960
	... (Metric Tons) ...	
Imports:		
Mackerel, frozen	1,450	-
Herring, fresh & frozen	5,583	4,014
Herring, salted	6,490	19,681
Fish fillets	-	1,419
Canned fish	2,069	6,141
Caviar	10	10
Fish meal	55,700	6,406
Total	71,302	37,671
Exports:		
Salmon	209	216
Marine fish	5,559	-
Fresh-water fish	1,403	1,398
Fish, smoked	236	6
Fish, salted	40	2,125
Canned fish	3,695	2,807
Crayfish	20	30
Total	11,162	6,582

Source: Polish Maritime News

frozen marine fish in West African countries, particularly in Liberia, Nigeria, and Ghana. Polish trawlers deliver fish directly from the fishing grounds to local ports. Canned fish exports have also increased greatly; in 1964 Poland exported highly diversified, attractively packed canned goods to more than 30 countries. Canned fishery imports decreased by two-thirds during 1961-1964. Poles now import only canned sardines in oil, a product greatly in demand but not produced domestically.

POLISH FISHERIES ATTACHE IN GHANA:

Poland is reported to have a fisheries attache in Accra, Ghana. Polish vessels operating off West Africa sell fish directly in ports of Liberia, Nigeria, and Ghana. Those deliveries helped raise Polish exports of fresh and frozen fish to 5,600 metric tons in 1964.



Portugal

CANNED FISH EXPORTS, JANUARY-SEPTEMBER 1965:

Portugal's total exports of canned fish in oil or sauce during the first 9 months of 1965 were up 14 percent from the same period of 1964, due mainly to larger shipments of sardines and mackerel. Sardines accounted for 75 percent of the total canned fish exports in January-September 1965.

Portugal's principal canned fish buyers during the first 9 months of 1965 were Germany with 11,280 metric tons, Italy 9,287 tons,

Portuguese Canned Fish Exports, January-September 1964-1965

Product	1965		1964	
	Jan.-Sept.	Jan.-Sept.	Jan.-Sept.	Jan.-Sept.
	Metric Tons	1,000 Cases	Metric Tons	1,000 Cases
In oil or sauce:				
Sardines	40,747	2,144	37,149	1,955
Chinchards	1,935	102	2,612	137
Mackerel	6,530	261	3,478	139
Tuna & tunalike	2,231	74	1,444	48
Anchovy fillets	2,367	237	2,340	234
Others	572	30	529	27
Total	54,382	2,848	47,552	2,540

the United Kingdom 5,697 tons, France 4,171 tons, the United States 4,090 tons, and Belgium-Luxembourg 3,546 tons. Italy's purchases of canned fish from Portugal in January-September 1965 were almost double those in the same period of 1964, and purchases by Germany were up 25 percent. But purchases by the United Kingdom were down 18 percent. (Conservas de Peixe, November 1965.)

CANNED FISH PACK, JANUARY-SEPTEMBER 1965:

The Portuguese pack of canned fish in oil or sauce in the first 9 months of 1965 showed some increase (by weight) over the pack in

Portuguese Canned Fish Pack, January-September 1964-1965

Product	1965		1964	
	Jan.-Sept.	Jan.-Sept.	Jan.-Sept.	Jan.-Sept.
	Metric Tons	1,000 Cases	Metric Tons	1,000 Cases
In oil or sauce:				
Sardines	26,815	1,141	34,177	1,799
Chinchards	2,072	109	1,356	71
Mackerel	11,147	446	3,375	135
Tuna & tunalike	6,324	211	4,708	157
Anchovy fillets	3,028	303	2,085	208
Others	1,599	84	534	28
Total	50,985	2,294	46,235	2,398

the same period of 1964 due mainly to a sharp gain in the pack of mackerel. But the important sardine pack was down. (Conservas de Peixe, November 1965.)



Rumania

LANDINGS AND FISHERY TRENDS, 1965:

Rumanian state-owned fishery enterprises landed 44,250 metric tons of fish in 1965 or 37 percent more than in 1964 when 32,404 tons (landed weight) were produced. United

Rumania (Contd.):

States Embassy, Bucharest, February 18, 1966.)

Editor's Note: Until 1964 more than two-thirds of the Rumanian catch consisted of fresh-water species; however, much of the 1965 increase of over 10,000 tons probably came from high-seas fishing. Rumania bought two large stern trawlers from Japan in 1964 and has been fishing off Africa's coast and in the Northwest Atlantic.

**Senegal****FISHERIES DEVELOPMENT PROJECT:**

The United Nations recently approved the following Special Fund project to aid fisheries in Senegal:

Fisheries development project, prospecting and development of sea fishing resources; fund allocation: \$773,000; recipient government contribution: \$668,000; duration: 5 years; executing agency: Food and Agriculture Organization. (United States Embassy, Dakar, February 1, 1966.)

**Sierra Leone****ATLANTIC TUNA FISHERIES:**

Following is a summary of tuna fishing activities off Sierra Leone:

The main tuna fishing areas off Sierra Leone for bait boats is in the triangle 9° N. 15° W., 12° N. 17°30' W., 10° N. 17° W. In 1965, many vessels fished along the edge of the shelf around Cape Palmas. Long-liners travel as far south as Ascension Island.

Four fishing methods are in use: (a) bait fishing from racks, (b) bait fishing with overhead pulleys, (c) long-lining, (d) combination purse-seine and bait (rack) fishing. No purse-seiners were seen in early 1966.

In 1964/65, tuna fishing off Sierra Leone was conducted by some 45 Spanish (Bermeo) vessels 90 feet long and 6 Japanese 120-ft. combination bait long-liners, with occasional visits from 3 or 4 French bait boats (80 ft.)

and two new Spanish bait-seiners. Fishing activity has declined recently, and in early 1966 the only tuna vessels in the area were 6 Spanish bait seiners and 4 Japanese vessels.

Sierra Leone's only shore facilities for tuna are in Freetown. They consist of 120 feet of dock with 14 feet of water depth and two jetties; 2,500 tons of cold-storage space; brine tanks for freezing; and 70-ton flake and block ice capacity. There is a pilot cannery.

Plans are under consideration for the extension of frontage, mainly to allow vessels other than tuna vessels to operate from the same base. (United States Embassy, Freetown, February 10, 1966.)

**South Africa Republic****ATLANTIC TUNA FISHERIES SITUATION:**

From a short survey of the current status of the tuna industry in South Africa, two factors emerge immediately: (1) Tuna fishing, which went through a modest boom period in 1963 and 1964, dropped off sharply in the latter part of 1964. According to an industry spokesman, there has been no commercial tuna fishing by firms in the South Africa Republic since that time. (2) Coincidentally with the fall-off in commercial tuna fishing, South African research on the incidence and habits of the tuna and in methods and extent of tuna fishing has virtually ceased.

Preliminary research conducted by the South Africa Republic Division of Sea Fisheries in 1960 and 1961 revealed the presence of four species of tuna off the Cape west coast: bluefin, yellowfin, big-eyed, and longfin. During the period of research, bluefin and big-eyed tuna occurred in greater numbers during the winter and spring (approximately June to December), whereas longfin and yellowfin tuna were most abundant during spring and autumn (October to December and March to June). Since that time, however, according to commercial and research sources, the movements and incidence of tuna shoals have varied widely, contributing to the industry's problems in mounting successful commercial tuna fishing operations and to reluctance to devote large resources to this type of fishing. Indeed, the Division of Sea Fisheries' Investigational Report No. 47, issued in November 1963, concluded that "too little is known of the long-

South Africa Republic (Contd.):

term pattern of occurrence of the fish to be certain that they will always be present in sufficient numbers to justify commercial operations."

A spokesman for the largest single operator in tuna fishing stated that his company, which entered the field in 1961, ceased tuna operations completely in 1964. By that time, the tuna "seemed to disperse" and tuna fishing had become economically not feasible.

All tuna fishing is thought to have been done by means of long-line gear. An experiment in purse-seine fishing, conducted by the Fisheries Development Corporation (in cooperation with the Division of Sea Fisheries and the fishing industry), from July 1962 to August 1963, produced discouraging results. Very few catchable schools of tuna were encountered, and the fish consistently managed to avoid netting by sounding. In addition, adverse weather conditions severely hampered fishing operations for 130 out of the 218 days in which the experimental ship was operative.

According to the best information available, the ships engaged in tuna fishing included about 40 wooden vessels, varying from 55-72 feet in length, and six 120-150-foot refrigerated steel vessels. Many of these apparently operated on a part-time basis: i.e., they were used for tuna fishing during the off-season months for the pilchard and anchovy industry. Two of the larger vessels, the Marinette (a 110-foot vessel owned by a recently liquidated firm) and the Beau Gest, built by a shipyard in Durban engaged in tuna fishing only briefly. Fishing industry experts in South Africa point to the unfortunate saga of that one firm as an example of the extreme hazards and uncertainty of tuna fishing under present conditions. The firm, formed in 1963, planned to utilize the Marinette as a "mothership," with a flotilla of approximately 8-10 smaller vessels carrying out actual fishing operations. In any event, only the Marinette ever engaged in tuna fishing, which proved unprofitable. The firm, meanwhile, ordered the construction of four or five 300-ton tuna vessels by the shipyard in Durban. The first was completed in June 1965 and subsequently sold in the yard in the wake of the firm's collapse. It is not known for what purpose the vessel will now be used.

Virtually all tuna caught in South African coastal waters was frozen whole and export-

ed. One company dominated the field, although tuna fishing was of considerably less importance in the operations of this company than the more profitable pelagic fishing and fish processing. This company maintains refrigeration facilities at Table Bay, which are now utilized for processing other types of fish. In general, processing facilities now used for pelagic or deep-sea fish could be converted to handle tuna.

No research directly related to the tuna industry is in progress currently. Two earlier research efforts, mentioned above, resulted in printed reports (A Preliminary Report on South African West Coast Tuna, Division of Sea Fisheries Investigational Report No. 47, 1963; and Purse Seine Netting for Tuna in S. A. Waters, by the General Manager of the Fisheries Development Corporation), which appeared in The South African Shipping News and Fishing Industry Review, January 1964. The results of research conducted subsequent to those two reports have not been prepared for publication. (United States Consulate, Cape Town, February 3, 1966.)



South-West Africa

PILCHARD SEASON STARTED JANUARY 31, 1966:

The 1966 pilchard fishing season in the Walvis Bay area of South-West Africa started on January 31, 1966. Of the seven plants in Walvis Bay, one started operating on January 31. Five of the remaining plants were scheduled to start at different times during February. One plant, undergoing extensive rebuilding, was not scheduled to open until late March or early April. (Namib Times, January 14, 1966.)



Spain

FREEZER-TRAWLER FLEET GROWING RAPIDLY:

In 2 years the Spanish freezer trawler fleet is expected to number 97 vessels and produce about 315,000 metric tons of frozen fish annually, according to a Danish report. The Spanish freezer trawler fleet has grown from 3 vessels in 1961 to over 40 vessels in 1965. Landings from the Spanish freezer fleet

Spain (Contd.):

were expected to total 105,000 metric tons in 1965.



Taiwan

LANDINGS IN 1965:

Taiwan's fishery landings (including marine, freshwater, and fish culture production) in 1965 totaled about 377,000 metric tons or approximately the same as in 1964, when 376,400 tons were produced. The total fish production goal for 1965 was set at 388,000 tons under Taiwan's 4-Year Development Plan. The failure to attain this goal was due to several unusually severe typhoons which hampered fishing operations, and changes in the migration patterns of offshore pelagic species. However, the 17 new tuna fishing vessels purchased with International Bank for Reconstruction and Development financing are now operational and will help to contribute to Taiwan's fisheries output. (United States Embassy, Taiwan, January 29, 1966.)

Note: See Commercial Fisheries Review, July 1964, p. 93.

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TUNA FISHING OFF SOUTH AFRICA:

Three trawlers from Taiwan arrived in Cape Town in late 1965 to start tuna fishing off the Cape. They planned to spend about a year off the west coast of South Africa. Later they may operate as far north as the coast of South-West Africa where Japanese and Israeli vessels are also fishing for tuna. (Nairobi Times, December 17, 1965.)



Trinidad and Tobago

TUNA FISHERIES, 1965:

The tuna fisheries of Trinidad and Tobago are not indigenous. Rather, Trinidad is used as one of a string of bases in the Atlantic by the Japanese tuna fishing fleet. Port-of-Spain is used primarily as a transshipment point, although of course, bunkering and procurement of supplies is effected as needed. The total Japanese Atlantic tuna fleet consisted of some 200 boats two years ago, but has now dropped to about half that number because of declining catches.

Up until a couple of years ago, the Atlantic tuna fishing grounds were apparently fairly well established and known to all in the trade. About 80 percent of the catches brought into Port-of-Spain then consisted of albacore and big-eyed. Albacore was caught in the Caribbean-West Indies area, big-eyed off the coast of Africa (Freetown, Dakar area), and both of those off Brazil. Of late, however, because of falling catches there have been no fixed grounds. The fishermen have had to search for tuna, and the composition of catches has been quite erratic. The varieties caught and brought to Port-of-Spain include albacore, yellowfin, big-eyed, a tuna-type fish called black marlin (which may be blackfin), straight marlin, small quantities of bonito and swordfish, kingfish, and sailfish.

All of the fishing done by the Japanese vessels is long-line fishing.

The Japanese boats using Trinidad as a base are the regular small-sized Japanese long-line tuna fishing vessels, i.e., 250-300 tons. Some 23 vessels are presently operating fairly regularly out of Port-of-Spain, although other vessels do call at irregular intervals as they cruise around the Atlantic. There is no local construction of tuna vessels in Trinidad and none contemplated.

The largest user of local facilities is a Japanese company. This group has arrangements to use in-bond cold storage and landing facilities owned by a local firm. Space in these cold storage rooms for about 1,400 tons of tuna is presently allocated for this purpose, and the tuna is re-exported to destinations such as the United States (albacore and yellowfin), Japan (marlin, black marlin and bluefin), and neighboring areas such as Venezuela, Barbados, Dominica and Martinique. There is no special technology used, handling is by means of forklifts, forklift baskets and hand labor; and there are no plans for expansion of facilities used only for tuna since the catch is down.

About three Japanese tuna boats from other companies use the services of other local shipping agents fairly regularly, but these transship directly from trawler to ship without the catches coming ashore. Port-of-Spain is a major port with bunkering facilities, boatyards, etc. Additional general purpose facilities such as cold-storage space can presumably be made available for tuna fisheries usage should the demand arise.

Trinidad and Tobago (Contd.):

There is no research being conducted by the local Government in the field of tuna. The U. S. Department of the Interior's Bureau of Commercial Fisheries is providing professional assistance for a U. N. Special Fund regional survey of Caribbean fishing grounds, aimed at developing the (general) fishing industry in the area. However, the activities of a Japanese Government survey boat, which recently passed through Port-of-Spain, are apparently focused much more directly on tuna. (United States Embassy, Port-of-Spain, January 27, 1966.)



Tunisia

MEDITERRANEAN TUNA FISHERIES:

Only one species of tuna is fished by Tunisia--bluefin (*Thunnus thynnus*). It is caught along the northeast coast during the months of July and August while the tuna is moving toward Sicily to spawn.

The tuna is caught with tuna nets ("madraques") fixed in place at the beginning of the season. They are composed of a series of nets spread out over several miles along the coast to a depth of 115-131 feet. Four "madraques" are in use and are the property of the Tunisia National Fisheries Office.

This method precludes the use of vessels in the actual fishing process. However, wooden barges or lighters are used to collect the fish from the nets. Eventually the Office hopes to acquire vessels capable of operating in the Atlantic in order to fish yellowfin and albacore tuna.

There are two canneries presently processing tuna in Tunisia. The larger of the two is at Sidi-Daoud and the other is in Mahdia. They employ modern equipment and have a total capacity of 40 metric tons of fish a day. The tuna is canned both in olive oil and in natural juices for home consumption and export, mainly to France.

Frozen tuna is occasionally imported from Norway and Japan for canning and later exported to Europe.

No extensive biological or technical research is presently underway. Some tagging

of tuna for tracking purposes was begun by the Oceanographic Institute of the Tunisian Government in May 1965. (United States Embassy, Tunis, February 10, 1966.)



U.S.S.R.

FISHERY LANDING TRENDS IN 1964-1965, AND OUTLOOK FOR 1966-1970:

The preliminary draft of the Soviet 5-Year Plan for the development of the fishing industry in 1966-1970 provides for a 50-percent increase over the 1965 fishery landings by 1970 so that total fishery production in 1970 should reach 8.5 million metric tons. Of this, 7.8 million tons is estimated to be fish catches, and the rest whales, marine animals, and other aquatic products. Most of the fish are expected to be caught on the high seas.

In 1964, the Soviet Union caught 5,121,000 metric tons of aquatic products. According to Food and Agriculture Organization (FAO) statistics, the Soviet marine and fresh-water fish catch in that year amounted to 4,475,000 metric tons, indicating that the almost 650,000 metric tons of other catches represented were whales, marine animals, and other marine products. It is interesting to note that the greatest increase in landings under the new plan is expected to come in the fish catch. The catch of whales and other marine mammals may even decrease somewhat, but may be compensated for by increased catches of other marine products, especially seaweed. In any event, the nonfish Soviet landings are expected to remain static during the next 5 years, amounting to about 700,000 metric tons in 1970.

During 1965, Soviet spokesmen repeatedly mentioned 10 million metric tons of fishery landings as the goal for 1970. This has now been scaled down to 8.5 million tons.

On December 24, the 1965 Soviet catch goal of 5.6 million metric tons of fish, shellfish, whales, marine mammals, and other marine products was attained. The 1965 catch was 10 percent greater than the 1964 catch of 5.1 million tons. A 10-percent increase is also planned for 1966 when total U.S.S.R. landings should reach 6.2 million metric tons. If the present rate of increase continues, the U.S.S.R. by 1967 or 1968 could become the leading fishing nation in the world. (The Fish-

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

ing News, November 1965, and other sources.)

INDIAN OCEAN FISHERY TRENDS:

Indian Ocean operations of the Soviet fishing fleet are expected to be greatly increased during the next 5 years. By 1970, the Soviets plan to catch 190,000 metric tons in that area; much of the catch may consist of tuna. Soviets began large-scale fishing operations in the Indian Ocean in 1964-1965. By 1964, they had developed a successful Indian Ocean shrimp fishery, and in 1965 they began tuna fishing in the area with Japanese-built factoryships. Total landings from that area, however, were small. Most of the Soviet vessels come from Black Sea ports through the Suez canal, but their exact number is unknown.

FISHING FLEET EXPANSION PLANNED FOR 1966-1970:

The Soviet Union plans to add 1,500 vessels to her fishing fleet during the 5-Year Plan (1966-1970). Most of those will be built in domestic shipyards, but foreign purchases (especially from Eastern Europe) will also be numerous. The additions will consist of 13 different classes. Among the larger types of vessels, the following planned additions are shown: 150 large stern freezer trawlers (Maiakovskii class from U.S.S.R., and Kosmos class from Poland), 100 large tropical stern trawlers (Tropik class from East Germany), 1 40,000-gross-ton giant fishing mothership (Vostok class, now being built at Leningrad), 45 refrigerated fish carriers (many purchased in Western Europe), undetermined number of floating fish factories (U.S.S.R., West German, and Japanese construction), and others. Soviets admit that "there is not enough room" on existing fishing grounds for all of these vessels, and say the only way to successfully use the new additions is for them to conquer new, unexploited fishing grounds." Most of these would be in the South Atlantic, South Pacific, and Indian Ocean. During the next 5 years, there probably will be increased Soviet fishery research effort, increased pressure on world fishery resources, and more joint Soviet enterprises with other nations.

NEW JAPANESE-BUILT FACTORYSHIP FOR SOVIET PACIFIC FLEET:

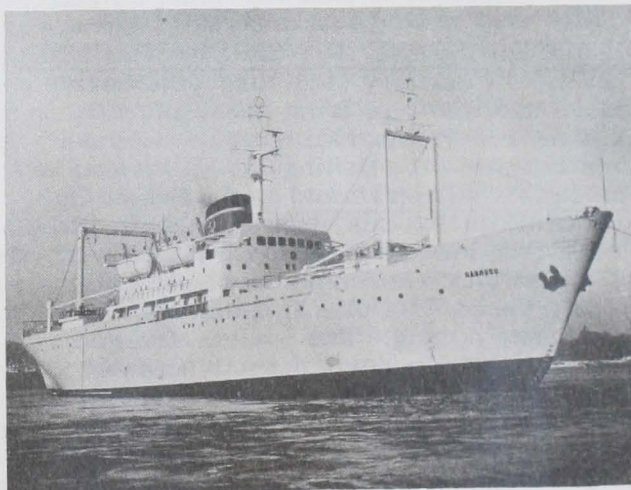
The Japanese-built fish factoryship Spassk (18,000 gross tons) was turned over to the Soviet Union's Far Eastern fishing fleet in January 1966. The vessel has refrigerated holds with a capacity of 14,300 cubic meters. Plans call for a total of 8 vessels of this class to be built at a Yokohama shipyard for the U.S.S.R. by the end of 1966. It is believed that they will all operate in the North Pacific Ocean and Bering Sea.

FISHERIES AIDED BY GROWING FLEET OF TRANSPORT VESSELS:

The Soviet Far Eastern Fisheries Administration had a total of about 100 refrigerated fish carriers and other fish transports in service as of January 1, 1966, in the Pacific Ocean and Bering Sea. In January 1959, less than 50 Soviet fish transports were available in the Far East. The total number of U.S.S.R. fish carriers at the end of 1964 exceeded 300 units.

FREEZER-TRAWLER "PAVLOVO" DELIVERED TO SOVIETS BY DANISH SHIPYARD:

The freezer-trawler M/S Pavlovo was delivered to V/O Sudoimport, Moscow, January 7, 1966, by a Copenhagen shipyard. The ves-



The M/S Pavlovo, a freezer ship which can also be used as a stern trawler.

sel is one of a series of freezer trawlers for the U.S.S.R. being built by the Danish shipyard to the following specifications: length

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

between perpendiculars 91 meters (298.5 feet), breadth 16 meters (52.5 feet), and deadweight tonnage 2,550 to 2,600 metric tons. The first in the series was the M/S Skryplev launched May 10, 1962.

The M/S Pavlovo is reported to be equipped with butchering lines to head and gut fish and airblast freezers to freeze dressed fish in blocks in metal pans. The vessel may receive fish from accompanying trawlers, or it may operate as a stern trawler itself. Speed on loaded trials was 14.0 knots. (Assistant Regional Fisheries Attache, United States Embassy, Copenhagen, January 19, 1966.)

Note: See Commercial Fisheries Review, Sept. 1965 p. 76.

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NORTH ATLANTIC STUDIES
OF OCEAN PERCH:

The Soviet fishery and oceanographic research vessel Neptun left her home port of Murmansk in late January 1966 for a research cruise in the areas southwest and west of Iceland. The purpose of the cruise was to investigate large ocean perch schools believed by Soviet biologists to inhabit those waters, and to test new fishing gear. The vessel belongs to the Soviet Polar Institute of Marine Fisheries and Oceanography (PINRO) of Murmansk.

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POLLOCK FISHERY IN WESTERN PACIFIC:

In early February 1966, over 100 Soviet seiners and trawlers from the Kamchatka, Sakhalin, and Primorskii Krai Fishery Administrations were fishing for walleye pollock (Theragra chalcogramma) in the Sea of Okhotsk off Kamchatka's west coasts. In 1964, the U.S.S.R. landed 213,600 metric tons of walleye pollock (also known as Alaska pollock); in 1966, the Soviets plan to catch over 300,000 tons by late spring. The Soviets sell some pollock to the Japanese directly in the fishing area. In addition to direct deliveries aboard Japanese fish meal factoryships (45,000 metric tons in 1966), the Soviets export walleye pollock to other Asian countries. Most of Soviet domestic pollock landings are reduced into fish meal; vitaminized medicinal fish oil is also produced from it.

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OCEANOGRAPHIC RESEARCH
IN THE SOUTHERN PACIFIC:

The Soviet oceanographic vessel Vitiaz stopped briefly in the Japanese port of Nagasaki in mid-February 1966 before sailing for southern Pacific waters where research was to be conducted by a party of oceanographers from the U.S.S.R. Academy of Sciences. From December 1965 to February 1966, the vessel had participated in a study of the Kuroshio Current off Japan.



United Arab Republic

FISHING FLEET EXPANSION
WITH SOVIET AID PLANNED:

Plans of the United Arab Republic to buy Soviet vessels and begin high seas fishing were announced to the Egyptian National Assembly February 12, 1966, by a Deputy Premier. Although the type of vessels to be purchased was not announced, it is thought that they may be large stern trawlers such as the U.S.S.R. recently also began exporting to Greece.

United Kingdom

INTERNATIONAL FOOD FAIR
AT MANCHESTER:

An international food fair will be held in Manchester, England, May 10-21, 1966.

In 1965, the Manchester fair, a major food fair in the English industrial Midlands, attracted 14,000 grocery operators and approximately 44,000 other tradesmen. This year the exhibit will feature a trade area, demonstration kitchen, and restaurant, and will be supplemented by an instore promotion in 1,000 retail outlets.

Each participating fishery firm at the fair will have display facilities equipped with shelves and a storage cabinet for sampling and promotional literature. Frozen products will be displayed in cases, furnished without charge, centrally located for common use by all exhibitors supplying frozen fishery products. Each participating firm will be required to provide a company representative or agent to attend its display full-time and to actively promote the company's branded products.

United Kingdom (Contd.):

United States firms were invited to participate in the Manchester fair. International trade fairs offer an excellent opportunity to expand foreign trade.



Venezuela

TUNA FISHERIES, 1965:

The Venezuelan tuna fleet operates in the southeast Caribbean and western Atlantic between Trinidad and the Guianas. Generally speaking, fishing is confined in the Caribbean between longitudes 62° and 69° W. and latitudes 12° and 17° N. and in the Atlantic Ocean between 49° and 59° W. and 7° and 12° N. In the Caribbean zone the fishing effort is concentrated between 65° and 68° W. and 12° and 17° N. to the west of Las Aves submarine ridge and between 62° and 63° W. and 12° and 17° N. to the east of this ridge. There is little fishing over most of the ridge. The catch averages about 70 percent yellowfin, 20 percent albacore and 10 percent big-eyed tuna. Occasionally, a bluefin tuna is landed and a few marlin (aguja) and sharks (cazones) are captured. Fishing is year round.

Long-line fishing is the principal method of taking tuna. The largest vessel utilizes 100 baskets (5 hooks to the basket); a few boats work with 200 to 260 baskets; the majority of the fleet operates with 100 to 120 baskets; and a few of the smaller vessels carry less than 100 baskets. The sardine (*Sardinella*) is used as bait. The catch rates are placed at 1 to 8 percent for yellowfin and 1 to 2 percent for albacore.

Venezuela's tuna fleet consists of 3 long-liners of Japanese origin--one of 150 tons and two of about 50 tons each--and 43 small converted fishing craft (formerly used to fish red snapper). The small craft are 20 to 30 meters in length with capacity ranging from 7 to 10 tons. The Japanese long-liners operate with mixed crews. The small boats have a crew of 5 to 10 men--12 at the most--who often are a "family group." Some consideration is being given to acquisition of additional tuna vessels but no firm decisions have been reached. Boats being built in shipyards of the canneries are small. Venezuela has no commercial shipyards building fishing vessels, and facilities for maintaining the larger

tuna vessels are limited and expensive. Additions by conversion of small line-fishing boats to tuna long-liners can be expected, particularly in years of good tuna fishing. The same boats, however, will continue to occasionally engage in bottom long-lining for snapper and grouper.

Shore-based facilities are very limited at both Cumana and La Guaira for landing tuna. Six canneries are located in Cumana, one at Mariguitar, and one in Porlamar. The eight plants have a production capacity adequate to process the 12,000 tons considered to be the national market's potential. A Government development agency for some time has had under consideration the development of a fishing port in eastern Venezuela at Puerto de Hierro (Gulf side of the Paria Peninsula). No firm decision has been reached to date. There has been no technological improvements in handling tuna on shore. Technicians are trying to influence captains of the small tuna boats using ice to limit trips to three to five days duration.

In 1964, Venezuela's Center of Fisheries Investigation, with the backing of the National Fund of Agricultural Investigations, started a study program of its tuna industry in view of the rapid growth. The first task of the study was to establish basic parameters such as fleet size, overall catches, areas of fishing, etc. Log books were prepared and given to boat captains as a method of obtaining precise data on place and date of fishing, time of set, number of baskets and type of tuna with its estimated weight. The Center's program also included sampling of commercial catch for body dimensions, weight, gonad size and state, stomach contents, etc. These studies are to provide data for length-frequency and length-weight studies and for morphometric-meristic work. As very few boats have good refrigeration equipment, captains gut the catch at sea and very few whole fish are available for study. The program is limited to those measurements largely unaffected by gutting. Some captains do bring in gonads in plastic bags provided by the Center marked to correspond to the fish. The Center has equipment available for studies involving electrophoresis and chromatography. The Center's first report is under preparation. (United States Embassy, Caracas, Venezuela, January 28, 1966.)

