

INTERNATIONAL

Japan and South Korea Hold Fishery Talks

After returning to Japan from the 3-day Conference of Ministers in Seoul, Republic of Korea (ROK), September 8-10, 1966, Japanese Fisheries Agency Director Hisamune summarized the talks:

- Exports of fishery products: ROK delegates sought to increase South Korean exports to Japan, but Agriculture-Forestry Minister Matsuno stated that Japan naturally would have to limit imports which would compete with domestic fishery products. He wished South Korea would promote exports of noncompetitive fishery products.

- Use of Japanese ports by ROK fishing vessels: The South Korean Government did not understand the details of Japan's decision to restrict entry into its ports of ROK fishing vessels. Many ROK officials held the erroneous impression that Japan's action suppressed the principle of freedom of the high seas. Public opinion in South Korea trended toward this view. Director Hisamune explained that Japan was only following the lead of other countries with coastal fisheries and was not discriminating against South Korea. To maintain order in its fisheries, Japan acted to keep its ports from becoming bases for foreign fishing vessels.

- Exports of fishing vessels to South Korea: Under the Japan-ROK Fisheries Agreement, exports of fishing vessels were to be transacted on a commercial credit basis. However, during the first year of the aid program, this principle was not followed because no commercial loans were extended. Vessel exports were handled on a nonrepayment basis (reparations). Director Hisamune stated: 1) from a practical standpoint, exports of fishing vessels under 20 gross tons to small-scale coastal fishery operators are difficult to finance on a commercial-credit basis, so the nonrepayment (reparations) fund can be used for this purpose; 2) of the total \$300 million commercial loan, the \$40 million earmarked for medium and small fisheries should be used to buy 20- to 100-ton vessels for offshore fishery, and ROK should guarantee repayment; 3) the \$50 million commercial loans for large fishing

companies will likely be processed through regular commercial channels (export banks).

- Imports of seaweed from South Korea: The Korean cabinet members were all interested in the seaweed problem, and again requested that Japan expand her seaweed import quota. They strongly urged that trade negotiations for the current business year be started early. ("Suisan Tsushin," September 13, 1966.)

Northwest Pacific Fisheries Convention

JAPAN TO RENEGOTIATE TREATY WITH USSR

Japanese fishery circles are concerned with the problems of renegotiating the Japanese-Soviet Fisheries Treaty. The Soviet Union has already made clear that it wants the treaty extended for another 10 years--and wants the salmon catch of the two nations closer to equal.

The Japanese Government and fishing circles favor extending the treaty for another 10 years. They are studying the effect that the entry of South Korea into the North Pacific fisheries may have on negotiations--as well as the question of the closure of Japanese ports to foreign fishing vessels.

The real issue is the 50-50 division of the salmon catch between the USSR and Japan. If accepted, it would drastically reduce the Japanese high-seas fleet. (Fishery Attache', U. S. Embassy, Tokyo, Sept. 20, 1966.)

North Pacific Fishery Convention

JAPANESE OFFICIAL DISCUSSES ITS RENEGOTIATION WITH CANADA AND U. S.

Minister of Agriculture and Forestry Matsuno and the Fisheries Agency's Production Division Chief Kamenaga discussed with the Canadian Government problems relating to the North Pacific Fisheries. Both men attended the Japan-Canada Ministerial Conference, October 3-6. They sounded out the Canadian Government concerning renegotiation of the Treaty and hoped to break the impasse in negotiations.

Kamenaga went on to Washington, D. C., after the Conference to discuss this matter with U. S. officials. In addition, he discussed on a preliminary basis the renegotiation of the 2-year Japan-United States king crab agreement which expires this year. ("Nihon Suisan Shimbun," Sept. 23, 1966.)

Fish Meal

WORLD PRODUCTION JANUARY-AUGUST 1966 IS 11% ABOVE 1965 PERIOD

World fish meal production in the first 8 months of 1966 was up about 11 percent from the same period of 1965. Output in 1966 rose sharply in Chile and Norway. Peru also increased production. But output was down substantially in the United States.

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

| World Fish Meal Production, Jan.-Aug. 1966 | | | | |
|--|----------------------------------|---------|-----------|-----------|
| Country | Aug. | | Jan.-Aug. | |
| | 1966 | 1965 | 1966 | 1965 |
| | (Metric Tons). | | | |
| Canada | 10,834 | 9,193 | 57,375 | 53,252 |
| Denmark | 14,005 | 14,475 | 74,830 | 79,921 |
| France | 1,100 | 1,100 | 8,800 | 8,800 |
| German Fed. Repub. | 7,096 | 6,706 | 48,854 | 44,867 |
| Netherlands | 1/ | 488 | 2/1,510 | 3,863 |
| Spain | 1/ | 1/ | 1/ | 3/13,247 |
| Sweden | 878 | 408 | 2,948 | 4,890 |
| United Kingdom | 6,526 | 6,406 | 60,556 | 54,567 |
| United States | 24,647 | 38,162 | 120,099 | 169,642 |
| Angola | 1/ | 2,818 | 4/27,843 | 26,561 |
| Iceland | 23,771 | 17,505 | 100,221 | 85,194 |
| Norway | 49,873 | 43,056 | 327,500 | 232,845 |
| Peru | 246 | 369 | 969,643 | 893,022 |
| So. Afr. (including S.-W. Afr.) | 27,420 | 17,271 | 5/234,549 | 250,093 |
| Belgium | 375 | 375 | 3,000 | 3,000 |
| Chile | 17,975 | 3,703 | 171,122 | 50,845 |
| Morocco | 6,500 | 1,650 | 16,700 | 9,550 |
| Total | 191,246 | 163,685 | 2,225,550 | 1,984,159 |

1/Data not available.
 2/Data available only for January-April 1966.
 3/Data available only for January-May 1965.
 4/Data available only for January-July 1966.
 5/Revised.
 Note: At present, Japan does not report fish meal production to the International Association of Fish Meal Manufacturers.

OECD

FISHERIES COMMITTEE MEETS

The Fisheries Committee of the Organization for Economic Cooperation and Development (OECD) held its 15th meeting in Paris, Sept. 28-30, 1966. The Committee

discussed its continuing work on an economic study of fisheries development in the North Atlantic. It instructed the OECD Secretariat to confine the study to the economic factors involved in rational exploitation of the fishery resources of the North Atlantic, and to coordinate the project with similar studies under consideration by other international organizations.

In other actions, the Committee reviewed reports on services rendered the fishing industry and continued its study of national fisheries policies.

The next meeting was set for December 5-7, 1966.

Oceanography

3 NATIONS CONDUCT RESEARCH

A joint fishery oceanography expedition of 5 research vessels, organized by the USSR, Norway, and United Kingdom, left Murmansk on September 5, 1966, for the Barents Sea. The 2,000-mile cruise of several months will include the northeastern Norwegian Sea. Two Soviet vessels are participating: The brand-new "Nansen," and the "Akademik Knipovich," one of the largest oceanographic vessels in the world. The British are supplying one research vessel and the Norwegians two.

The Soviet part of the research is coordinated by the Polar Institute of Fisheries and Oceanography (PINRO) of Murmansk, headed by Dr. Arkadii P. Alekseev. The Norwegian part will be conducted by the Bergen Fisheries Research Institute, headed by Dr. Gunnar Rollefson. The distribution of young cod her- ring, ocean perch, and other species will be studied. At the end of the cruises, scientific data will be compared and analyzed in a joint meeting at Bergen. Research in the Barents Sea is needed because heavy fishing has greatly depleted cod stocks there. Soviet landings of Polar cod in 1965 were reportedly 60 percent below previous years.

This joint research again confirms the good relations in fisheries between the Norwegian and Soviet Governments. British participation probably resulted from contacts during the 1965 visit of a parliamentary fishery delegation to the USSR. The Soviets gave considerable publicity to the joint expedition.



World Network Provides Weather Information to Mariners

The skipper of a small craft running close to shore can get timely and accurate weather forecasts and warnings from commercial radio stations. But the skipper of an ocean-going vessel needs more refined and specialized weather services. Through its Marine Weather Service, the Weather Bureau of the Commerce Department's Environmental Science Services Administration (ESSA) offers this vital information to all mariners.

Before radio communication, a mariner had to keep a sharp eye on the barometer and study the wind, sea, and clouds to tell what sort of weather he was running into, or what was overtaking him. Near the coast and in port, visual weather warnings--flags by day and lights by night--were of some help.

Until this century, the lack of data from oceanic areas confined weather advices to descriptions of conditions over coastal and inland waters. In 1905, the first radio weather report received by the Weather Bureau from a ship at sea opened a new era in marine forecasts and warnings. It soon became apparent that reports from many different areas could produce a fairly good picture of oceanic weather systems and their movements.

Shortly thereafter, the meteorological services of all maritime nations were cooperating in a plan to collect reports from ships and issue advices of storms at sea. Concurrently, an internationally understood numerical code was devised for transmitting

ships' weather messages. These plans were promoted by the International (now World) Meteorological Organization and are still in use today.

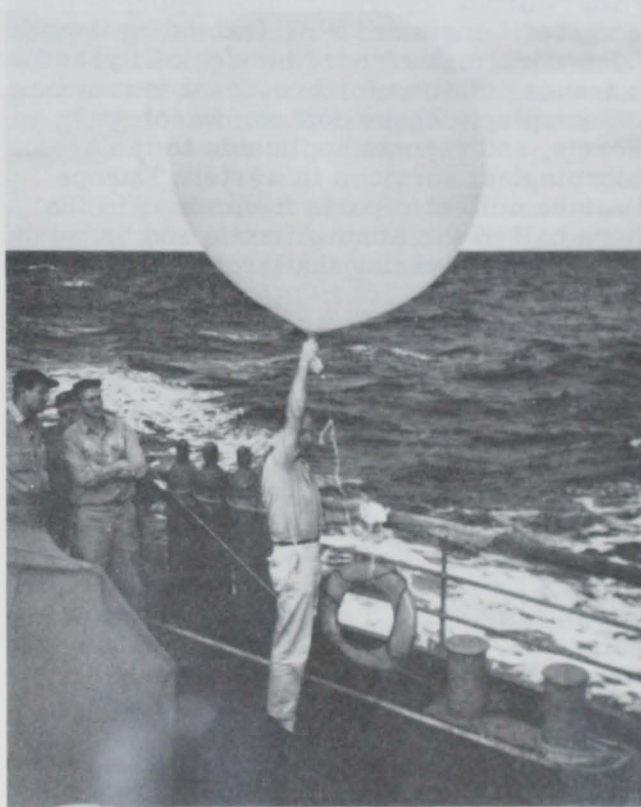


Fig. 2 - Weather balloon launched from ships to gather information on upper air. Weather reports from many ships are used to prepare forecasts for aviation and marine interest. (Photo: ESSA)



Fig. 1 - The Coast Guard cutter "Pontchartrain" battles rough weather on Ocean Station Baker. (Photo: U. S. Coast Guard)

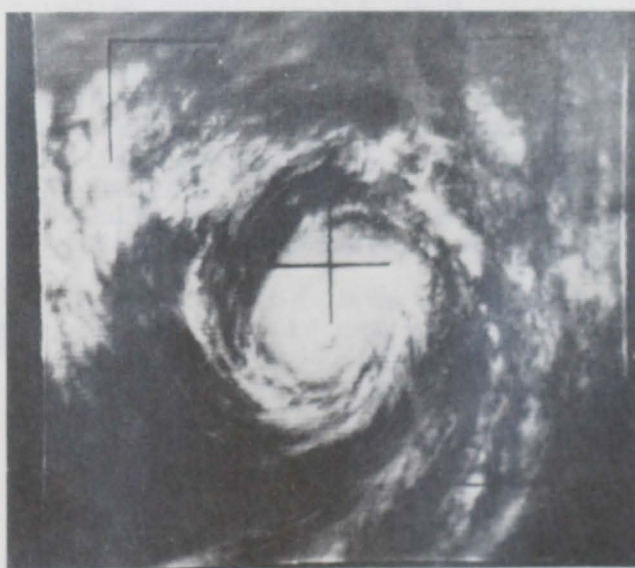


Fig. 3 - A weather satellite photographed Hurricane Emily threatening shipping off Mexico's West Coast in September 1965. Satellite pictures of weather over the oceans have improved forecasts and warnings prepared for mariners. (Photo: ESSA)

How North Atlantic Is Covered

The North Atlantic Ocean area can serve as an example of this system. The Weather Bureau collects reports from shipping in waters west of Longitude 35° W. (extending about 1,700 nautical miles from New York City) and also issues bulletins for broadcast to merchant shipping. These contain warnings, forecasts, and reports applicable to the area. Meteorological services in western Europe and Africa collect reports from ships in the eastern half of the North Atlantic and broadcast bulletins covering that area.

More recently, U. S. weather satellites such as ESSA 1, 2, and 3 have provided pictures of weather systems from every part of the earth--from Indian Ocean typhoons to Saint Lawrence Seaway ice conditions.

If a captain wants a "weather picture" of his area, a coded weather map analysis--a "canned map"--is available from broadcast bulletins. Using the coded information, he can draw his own map showing locations of Highs, Lows, frontal systems, etc., to determine whether he will meet favorable or adverse weather and sea conditions.

Weather information from ocean areas is also important to airline pilots. To serve the growing stream of oceanic flights that began during World War II, an international network of ocean-going weather ships was established. Twelve ships now are at assigned stations in the North Atlantic and North Pacific Oceans. The United States maintains 6 vessels; in addition to regular Coast Guard crews, they carry specially trained Weather Bureau technicians to make surface and upper air reports on daily schedules.

These floating weather stations, which stay within a 10-mile square for about 25

days, collect oceanographic data, provide navigational aids to ships and aircraft, and perform search and rescue duties when required.

Reports by these ships, merchant vessels, coastal and island stations--and satellite photographs of global weather systems--complete U. S. weather coverage for the high seas.

8-Million-Boat Armada

There are an estimated 8 million boats of all types operating in U. S. coastal waters, lakes, and inland waterways.

But the shrimp trawler plying the Gulf Stream, the hydroplane in Washington's Puget Sound, the ore-carrying barge on the Great Lakes, and the yacht off California will only put out from shore "weather and seas permitting."

To improve weather services to marine interests--particularly pleasure boating in harbor and coastal areas along the Atlantic and Gulf coasts--Weather Bureau-operated VHF radio stations soon will provide continuous weather warnings, forecasts, and reports to mariners. The stations are part of a planned nationwide network. Already, the broadcasts operate in the New York City area and the Chicago area of Lake Michigan.

ESSA's Environmental Data Service is a data bank for information on average temperatures, precipitation, cloudiness, etc. Weather summaries and climatological tables are available for U. S. and foreign waters; atlases and pilot charts for offshore cruising and transoceanic travel; and climatological summaries for individual states aid boaters.



FOREIGN

CANADA

LANDINGS ARE DOWN BUT VALUE UP SLIGHTLY

Landings during the first 6 months of 1966 totaled 808.2 million pounds (valued at C\$52.2 million) compared with 834.2 million pounds (valued at C\$51.2 million) during the same period of 1965, reports the Monthly Review of Canadian Fisheries Statistics, June 1966.

Landings and ex-vessel values of principal species were:

| Species | Jan. - June | | | |
|-----------------------------|------------------|---------|-----------------|--------|
| | 1966 | 1965 | 1966 | 1965 |
| | Landings | | Value | |
| | . (1,000 Lbs.) . | | . (1,000 C\$) . | |
| <u>Atlantic Coast:</u> | | | | |
| Cod | 219,877 | 208,093 | 9,764 | 8,273 |
| Haddock | 65,085 | 51,892 | 4,648 | 3,399 |
| Pollock | 18,353 | 26,346 | 723 | 925 |
| Flounder and sole | 88,874 | 75,356 | 3,016 | 2,505 |
| Herring | 108,066 | 93,025 | 1,500 | 1,178 |
| Swordfish | 627 | 1,346 | 378 | 613 |
| Lobsters | 20,127 | 23,489 | 11,754 | 14,789 |
| Scallops | 7,527 | 6,751 | 2,906 | 3,845 |
| <u>Pacific Coast:</u> | | | | |
| Halibut | 14,929 | 15,619 | 5,145 | 4,747 |
| Herring | 137,517 | 221,205 | 2,299 | 2,904 |
| Salmon | 7,510 | 5,384 | 3,290 | 2,487 |

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CONSIDERS LIMITING SALMON FLEET SIZE

Canadian Government and fishermen's representatives met in Vancouver, September 26, to discuss tentative proposals to license vessels for the salmon fishery.

Because the Government is concerned about the increased fishing for salmon, its Federal Department of Fisheries has suggested for consideration proposals to keep fleet in the salmon fishery at present level.

The Vancouver meeting produced no agreement on steps to reduce the catching power of salmon fleet; no decision was made on a restrictive vessel licensing policy. However, the Canadian Fisheries Minister warned that no assurance could be given that a license would be issued for a vessel to engage in the salmon fishery in 1967 unless the applicant had a vessel licensed for salmon

in 1966--or unless arrangements to acquire the vessel, for which a license was sought, had been completed prior to the Minister's announcement. Special consideration would be given to salmon fishermen who did not fish in 1966 for some valid reason.

The Government plans to hold another meeting with industry on this subject before the end of 1966. (Canadian Department of Fisheries, Ottawa, Oct. 5, 1966.)

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HERRING FISHERMEN ASK HIGHER EX-VESSEL PRICES

British Columbia herring fishermen have asked C\$20.48 a ton for herring in 1966/67 contract negotiations with processors. That would be an increase of C\$3.08 over the 1965/66 price of C\$17.40 a ton. (The Fishermen, Vancouver, Sept. 23, 1966.)

Note: Ex-vessel prices for herring in British Columbia are not comparable to prices in certain other countries because British Columbia processors furnish much of the equipment used in the fishery.

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TWO ATLANTIC CRAB SPECIES SHOW PROMISE

Of the various crab species off the Canadian Atlantic coast, the spider or "queen" crab (Chionoecetes opilio) and the rock crab (Cancer irroratus) show promise for increased commercial use in the near future, says the Canadian Department of Fisheries.

The spider crab is larger, of higher quality, and easier to process, but it is probably much less abundant and less widely distributed than the rock crab. It may make significant contributions to dragger catches in the Gulf of St. Lawrence--but seems unlikely to form the basis of an independent fishery.

Canadian Atlantic landings of spider crab have not exceeded 18,000 pounds a year. Exploratory fishing began in 1965 as a joint Canadian Federal-Provincial project. It expanded to include 3 exploratory vessels--1

Canada (Contd.):

operating from each Maritime Province. One vessel uses trawls; the other 2 use traps--steel framework with "poly" netting. Each trap can hold up to 300 pounds. Several large concentrations of spider crab have been found, including one estimated to be several miles long and six miles wide. The experiment also involves biologic studies and ways the spider crab can be processed for marketing.

Rock Crab May Supplement Lobster

The rock crab may become a valuable supplement to lobster catches, particularly if

more efficient processing methods would permit higher prices to the fishermen. Its small size, low meat yield, high processing costs, low prices, and the difficulties in regulating a trap fishery for rock crab during closed lobster seasons tend to rule out an independent fishery.

The Jonah crab (Cancer borealis) does not seem to be caught in lobster traps in sufficient quantities to warrant appreciable commercial use--but information on seasonal and geographic variations in abundance is scarce. The red crab (Geryon quinquedens) shows real promise, particularly in conjunction with a deep-water trawl fishery for lobsters.



RARE MARINE SPECIES CAUGHT OFF CALIFORNIA COAST

A new species of angler fish and the largest whale fish on record have been caught in the San Clemente basin of the Pacific Ocean by marine biologists from the University of Southern California. The whale fish may also be a new species.

Both prize biological specimens were taken on the same day by researchers aboard the research vessel Velero IV, operated by the University of Southern California's Department of Biological Sciences and the Hancock Foundation. While using a large net, the research team caught both fish in the 7,000-foot deep waters south of San Clemente Island, 60 miles off the California coast. The cruise of the Velero IV is part of an investigation the University is making on mid-water organisms. The study, financed by a \$43,400 National Science Foundation grant, will seek to identify various types of fish in open water and to determine how their living habits relate to their environment.

The angler fish was identified as a Gigantactis, but when studied for further classification it could not parallel any of the nine known species of that genus. The fish differed from any known species, first of all, because it had more pectoral fin rays than any other. The bony structure inside the head, which enables the fish to open and close the lower jaw to wash water over the gills, was much better developed. Angler fish are so named because they have antenna-like filaments with light-producing photophores which serve the fish as a lure or bait. In the specimen taken, the "bait" had many more appendages than other species and a different and more slender shape. Most angler fish of that genus are less than a foot in length. This specimen was 16 inches from the tip of the snout to the end of the vertebral column. It was the largest of its kind ever discovered.

The whale fish, largest in its family, is a member of the Gyrinomimus genus. It was more than a foot long. Like all whale fish, it had a large head, tiny eyes, gaping jaws, and lateral line pores. One of the marine biologists said that it was not possible at the present time to classify the whale fish with any of the four known Gyrinomimus species. A study was to be made of all its characteristics before the determination can be made.

LATIN AMERICA

Mexico

PLANS SHRIMPING EXPANSION IN INTERNATIONAL WATERS

Mexican shrimp catches reached peak in 1961 of 75,000 metric tons but leveled off in 1964 and 1965 to 70,000 and 60,000 tons. High prices kept 1965 ex-vessel value close to US\$45 million, about 1964 value.

To further extend industry beyond coastal waters, present fleet will be doubled to over 1,000 vessels, many sonar-equipped.

The disclosure of these plans followed the signing of 3-year contract between fishing cooperatives and vessel owners. Leaders estimated shrimp take--expanded to new areas during contract period--of at least 2.5 billion pesos (US\$200 million). Most of the catch, principally in frozen form, will be exported to the United States.

Reversing the usual trend of U. S. vessels off the Mexican coast, at least 28 Mexican shrimp vessels were already operating in international waters off the Texas coast in mid-September. (Mexico City News, Sept. 17, 1966.)

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GULF SHRIMP FISHERMEN WIN IMPROVED CONTRACT

Shrimp fishermen of Gulf ports began fishing on September 21 under a new 3-year contract. The contract between vessel owners and the fishermen's cooperatives was signed September 14. Although the fishermen's benefits were increased considerably, vessel owners reportedly will still be able to make a profit, especially with current high prices in U. S. and Mexican markets.

Under the new price scale, the crew is paid 2,990 pesos (US\$239) a metric ton for all shrimp larger than 26 to the pound (heads-off weight), and 1,300 pesos (US\$104) for those 26 to the pound, or smaller. At present prices and usual size proportions, this is said to amount to about 40 percent of the value. At conversion rate of 12.5 pesos to the dollar, and 2,204 pounds to metric ton, the fishermen receive about 10.85 U. S. cents

a pound for large shrimp, and 4.72 U. S. cents for small shrimp.

| Crew Member | Large Shrimp | | Small Shrimp | |
|--------------------|------------------------------|------|--------------|------|
| | Pesos | US\$ | Pesos | US\$ |
| | (Per Metric Ton) | | | |
| Captain. | 1,050 | 84 | 410 | 33 |
| Engineer | 820 | 65 | 350 | 28 |
| Winchman | 560 | 45 | 280 | 22 |
| Cook | 560 | 45 | 260 | 21 |
| Total | 2,990 | 239 | 1,300 | 104 |

In addition, the vessel owner pays each crewman 12 pesos (US\$0.96) a day at sea for groceries and the cooperative associations a specified amount to help defray their administrative costs. At Ciudad del Carmen and Campeche, State of Campeche, this amounts to 650 pesos (US\$52) a metric ton; of which 100 pesos (US\$8) is contributed to support of University of the Southeast in Campeche, and a school in Carmen. At Tampico, the payment is 550 pesos (US\$44) a ton. The vessel owner pays all taxes, costs of operation, and provides nets and other equipment.

Gulf vs. Pacific Shrimping

Shrimp fishing on the Gulf Coast differs from the Pacific Coast in at least two respects, which make contract comparisons difficult: On the Gulf, most vessels are owned by private individuals who are often the owners of the freezing plants. The crewmen are paid by the owners. On the Pacific, most vessels are owned by fishermen's cooperatives to which the crewmen belong. On the Gulf, the shrimp belong to the vessel owner, and he pays the crew in money for catching them. On the Pacific, the vessel owner, whether an individual or cooperative, and the crew share shrimp ownership. Disputes on the Pacific concern division of catch and expenses. The somewhat simpler method of owner paying crew a certain amount per unit of catch makes for easier negotiations. (U.S. Embassy, Mexico, D. F., September 28, 1966.)



Cuba

PLANS TO EXPAND STATE-OWNED FLEET

Before the Castro Revolution, the Cuban National Institute of Fishing ("Instituto Na-

Cuba (Contd.):

cional de la Pesca" (INP)) did not own or operate commercial fishing vessels. After Castro's takeover, and the nationalization or expropriation of larger fishing companies, the INP built up a state-owned fishing fleet. The State Fishing Company ("Empresa Estatal de Pesca") was formed to increase fisheries production along Soviet lines--by direct state capital investment and ownership of the means of production. The company is important now and in potential export picture.

Today, the state-owned Cuban fishing fleet consists of 3 major segments: the Cuban fleet, the Gulf fleet, and the Cayo Largo del Sur fleet.

| Status of State-Owned Fishing Company ("Empresa Estatal de Pesca") | |
|---|--|
| CUBAN FISHING FLEET ("Flota Cubana de Pesca"): | |
| <u>June 30, 1965:</u> | |
| 2 | trawlers (bought from Poland in 1962); now used for research |
| 5 | tuna vessels (bought from Japan in 1962) |
| 5 | side trawlers (SRTs obtained from Soviets in 1962) |
| 1 | tuna vessel (Spanish owners; operates from Havana) |
| 13 vessels on June 30, 1965. | |
| <u>Planned 1966 deliveries:</u> | |
| 20 | tuna vessels (from Spain) |
| 6 | Cod vessels (" ") |
| 6 | Victorian-class vessels (from Cuban shipyards) |
| 32 vessels planned for 1966. | |
| GULF FLEET ("Flota de Golfo"): | |
| 58 vessels (Lambda and Ro classes) June 30, 1965. | |
| 65 vessels (estimate) to be delivered by end of 1966 from Cuban shipyards | |
| 120-130 vessels at end of 1966. | |
| CAYO LARGO DEL SUR FLEET: | |
| <u>June 30, 1966:</u> | |
| 30 | vessels (Sigma and Cardenas classes) |
| 1 | lobster boat (Cardenas shipyard) |
| 31 vessels, June 30, 1966 | |

• The Cuban fleet (table) is by far the most important. It is earmarked for rapid expansion. Founded in June 1962, it started operations with a few trawlers and tuna vessels bought or otherwise obtained from Poland, Japan, and the USSR. The tuna vessels operate mostly in the Gulf of Mexico and Caribbean, but they also have traveled to waters off Recife, Brazil, in the South Atlantic. A major expansion of this fleet was planned for 1966 with the purchase of 20 tuna vessels from Spain. Trawlers obtained from the USSR operated for a while with a Kaliningrad-based group of Soviet vessels fishing in the Gulf of Mexico. In 1965, when the USSR decreased its Gulf fishing, the 5 trawlers lost operational and exploratory support and their land-

ings fell off 18 percent from 1964 (data available only for first half of both years). For a short time, the Cuban trawlers operated also on Georges Bank and off Canada's east coast. Finally, they settled down in the traditional fishery on Campeche Banks off the Yucatan Peninsula in the Gulf of Mexico. There will be an important expansion of Cuban fishing into North American waters in 1967, when the cod-fishing vessels ordered from Spain in 1965 for 1966 delivery become operational.

• The Gulf fleet has about 100 vessels of the "Lambda" and "Ro" classes--a capacity of 107 and 43 gross tons, crew of 15 and 10 fishermen, respectively. That fleet will be expanded greatly in coming years.

• The Cayo Largo fleet, based in Canareos Key east of Isla des Pinos, is important as a training center for young fishery apprentices (about 200) from the Giron Fishing School, although the vessels are few and small. Cayo Largo itself is being built up as a fish-processing and ship-repairing base.

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SOVIET FISHERY SPECIALISTS VISIT

The Soviet Deputy Minister for Food Industries visited Cuba during the last week of September 1966. Included in his party were two top-flight engineers from the Soviet Ministry of Fisheries; both are associated with the Scientific Research Institute for the Mechanization of the Fishing Industry (NIKIMPR).

The NIKIMPR has designed all recently introduced mechanized lines in the Soviet fishing industry, both on shore and aboard ocean-going vessels. It is likely that the Soviet Union, under the technical fishery aid agreement with Cuba, is introducing in that country her recent innovations in fish processing.



Brazil

MOBILE FISH MARKETS
ARE SUCCESSFUL

Mobile markets built on Volkswagen Kombi vehicles and used by the State Government of Bahia, Brazil, have been successful in selling frozen fish and a few other products.

Brazil (Contd.):

The fish sold through this system are being priced at about 34 U. S. cents a pound and less. Chickens cost about 50 U. S. cents a pound. There are 16 such mobile units with refrigeration equipment operating in and around Salvador. The Governor explained that these mobile markets help keep prices down in stores around the city selling similar products. He claimed that, politically, the impact of these mobile markets and stationary government-operated markets had been more important to him than his highway development program, water works program, electrical program, and even his educational program.

The markets operate at cost. Prices cover expenses and amortization of equipment. A 1 percent sales commission is given to drivers of the mobile units, and this has been sufficient incentive for them to keep the units operating well. (U. S. Consulate, Salvador, Oct. 3, 1966.)

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JAPANESE WHALING TO INCREASE OFF BRAZIL

The Japanese expect to double the take of whales off Brazil this year. Recently, a North Brazilian fishing company was established jointly by a Japanese company with Brazilian capital. In the past, the take of whales (mostly sei) was about 120 a year. By August 1966, 150 whales had been killed and the take was expected to total 250 by the end of the season in November. Two factors are believed to have contributed to the larger catch: purchase of the whaler "Koyo Maru" from another Japanese company and use of that vessel's gunner; and a move to new whaling grounds.

With the decrease in the Antarctic whale quota, Japan must attempt to satisfy the domestic demand for meat and other whale products in 2 ways: by developing resources such as those off Brazil, and continued intense whaling activities in the North Pacific, the China Sea, and elsewhere. (Fishery Attaché, U. S. Embassy, Tokyo, Sept. 29, 1966.)



Ecuador

TUNA CANNERY CEASES OPERATIONS

A tuna cannery that is a subsidiary of a U. S. firm at Manta, Ecuador, ceased operations in late September 1966 due to a shortage of bait fish along the Ecuadorian Coast. The Directorate-General of Hunting and Fishing recently asked Manta tuna vessel fishermen to limit their bait-fishing activities to the area outside the bay in the vicinity of Bahia and Caraquez. Small-boat operators accused the tuna vessel operators and the canning firms of having fished out traditional bait-fish resources and asked for more government protection for their inshore fishing grounds. Part of the problem was related to the limited range of the Ecuadorian tuna fishing vessels. (U. S. Consul, Quito, Oct. 7, 1966.)



Peru

FISH MEAL PRODUCTION AND SUPPLIES ARE HIGH

Peruvian fish meal production for September 1966 was estimated at 100,000 to 120,000 metric tons, compared to 17,100 tons for September 1965. Exports for the first half of September 1966 were 33,800 metric tons versus 18,500 tons for the same period in 1965. Stocks on September 15, 1966, were 271,700 tons against 34,500 tons on September 15, 1965.

Prices for fish meal have dropped somewhat on the Hamburg (West Germany) market; however, no drastic drop in price appears imminent. Factors offsetting a drastic drop are: (1) Peruvian fishermen struck at the end of September and went on token strike in early October 1966; if strike continues, prices could stabilize or trend upward; and (2) recovery in world-wide consumption of fish meal has been under way since July or August 1966; it may be stabilizing influence if it continues for next 3 or 4 months. But world price could be forced down if there is excessive Peruvian production of fish meal when fishermen's strike threat ends--combined with an abundant anchovy resource. (Oil World Weekly, Sept. 30, and Oct. 7, 1966.)



EUROPE

USSR

1965 FISH MEAL PRODUCTION IS HIGH BUT BELOW NEEDS

During 1965, the USSR produced 240,000 metric tons of fish meal--twice the 1963 figure--but still far below the needs of agriculture and the poultry industry. These are estimated at 500,000 tons. Meal production exceeded the planned quota of 200,000 tons by 20 percent, or even more if the whale meal was not included in the fish meal total.

To satisfy the growing need for meal products, the Soviet 5-Year Plan (1966-1970) provides for a fivefold increase in production to 1 million metric tons by 1970. Of that total, 80 percent will be produced aboard fishing vessels.

Although the USSR needs fish meal, she has not imported any. Small traditional exports of about 4,000 tons a year are made to Czechoslovakia and other East European countries. In 1965, about 6,700 tons of meal were exported to Japan from her Pacific fisheries.

Soviet studies show that the use of fish meal makes good economic sense. One metric ton of fish meal added to hog feed increases the yield of pork by 700-800 kg.; added to poultry feed, it increases egg production by 25,000 eggs. It also replaces 3 tons of vegetable feeds.

In 1963, the Soviets reported to FAO a production of 113,000 tons of fish meal and 28,000 tons of whale meal--compared to 40,000 tons of fish meal and 4,000 tons of whale meal in 1958. (Data for 1964 are not yet available.) (Rybnoe Khoziaistvo, Aug. 1966, and other sources.)

* * * * *

DOUBLES EXPORTS TO JAPAN IN 1965

In 1965, the USSR exported to Japan almost 18,500 metric tons of fishery products valued at US\$3.7 million--almost twice the 1964 figure and 8 times that of 1963; values increased proportionately (table). Fresh and frozen made up the bulk of fishery exports to Japan in 1965 (9,700 tons, or 52 percent)

followed by fish meal (6,700 tons, or 36 percent). Bering Sea shrimp exports also increased greatly in 1965--to 1,600 tons from 50 tons in 1964--as did cod roe, herring roe and shellfish meal.

| Product | Quantity | | | 1965 Value US\$1,000 |
|----------------------------------|----------|--------|-------|-------------------------|
| | 1965 | 1964 | 1963 | |
| .. (Metric Tons) .. | | | | |
| Fresh and frozen: | | | | |
| Herring | 2,728 | 1,390 | 790 | 379 |
| Salmon | 700 | 1,138 | 236 | 611 |
| Sea bream | 127 | 715 | 13 | 19 |
| Other fish | 4,463 | 4,539 | 456 | 645 |
| Shrimp | 1,632 | 54 | - | 332 |
| Other shellfish 2/ | 40 | 52 | 19 | 6 |
| Total | 9,690 | 7,888 | 1,514 | 1,992 |
| Salted, dried and smoked: | | | | |
| Cod roe | 214 | 96 | 2 | 103 |
| Herring roe | 49 | 1 | - | 126 |
| Other roe | 6 | - | - | 2 |
| Other fish | 1,040 | 1,463 | 642 | 149 |
| Other shellfish | 9 | 36 | - | 8 |
| Total | 1,318 | 1,596 | 644 | 388 |
| Canned: | | | | |
| Caviar | 194 | 181 | 108 | 212 |
| Other | 3 | - | - | - |
| Total | 197 | 181 | 108 | 212 |
| Other products: | | | | |
| Fish meal | 6,734 | - | - | 1,008 |
| Shellfish meal | 527 | 352 | 43 | 66 |
| Seaweeds 3/ | 5 | 523 | 170 | 1 |
| Other 4/ | 5 | - | - | 3 |
| Total | 7,271 | 875 | 213 | 1,078 |
| Grand Total | 18,476 | 10,540 | 2,479 | 3,670 |

1/US\$1.00 equals 360 yen.
 2/Includes small quantities of live shrimp in 1964 and 1963.
 3/Includes small quantities of edible seaweeds in 1965 and 1964.
 4/In 1964, includes some agar-agar, shells, and other products.
 Source: Trade of Japan, 1963, 1964, and 1965, Japan Tariff Association.

Japan exports practically no fishery products to the Soviet Union. However, the total trade balance in fishery and related products and services favors Japan because her shipyards build new fishing vessels for the Soviet Union, and repair, overhaul, and otherwise service the Soviet fishing fleet. The total annual cost of those export services exceeds considerably the total value of imports of Soviet fishery products.

Trade is beginning to play a large part in Soviet fishery policies. On one hand, the Soviets are interested in importing Western technical know-how (new vessels, processing machinery, gear, etc.) for which they have to pay in hard currency; this, on the other hand, spurs them to increase their fishery exports, especially to countries which can also pay in hard currencies (Japan for one).

USSR (Contd.):

Not until the early 1960s, soon after normalization of their political problems, did Japan and the USSR begin to trade in fishery products and services. It can be assumed that Soviet fishery exports to Japan will continue to increase.

* * * * *

WHALE PRODUCTS EXPORTED
TO JAPAN

During the first 9 months of 1966, about 3,000 metric tons of Soviet-produced whale meat were exported to Japan; by the end of 1966, over 5,000 tons of whale meal and other specialty whale products (fins, hearts, peritoneum, etc.) were slated to be exported. It seems that the Soviet-Japanese fishery trade, which expanded substantially in 1965, is increasing further in 1966.

* * * * *

SELLS ALASKA POLLOCK
TO JAPAN FOR FISH MEAL

Two Japanese fishery firms were scheduled to negotiate with the USSR to buy 45,000 metric tons of Alaska pollock in 1967 from Soviet vessels fishing off West Kamchatka in the Sea of Okhotsk. Because of market conditions, the firms hope to obtain a more favorable price in 1967 than the US\$20.50 a metric ton paid in 1966. The fish will be used to manufacture fish meal.

Next year will be the third that Japan has bought Alaska pollock. Meal made from it is of high quality and wanted in domestic and export markets. (Kihon Keizai Shimbun, Sept. 22, 1966.)

* * * * *

MURMANSK FISHERIES ARE EXPANDING

The Main Administration of Northern Fisheries at Murmansk is about to receive 11 large fishing and fish-processing vessels. Poland will deliver 3 large freezer stern trawlers and 2 base ships, Denmark 2 large production and transport refrigerators, and Finland 1 tanker. The remaining 3 vessels will be constructed in domestic shipyards: 2 fish carriers in Nikolaev-on-the-Black Sea, and 1 production and transport fish carrier

in Leningrad shipyards. This is only one example of the large Soviet program of buying fishing vessels abroad--and the important role foreign shipyards play in supplying modern vessels to the expanding fishing fleet.

* * * * *

NEW STERN TRAWLERS
REACH PACIFIC FLEET

In August and September 1966, the Far Eastern Main Fisheries Administration received at least 6 large stern trawlers of the Maiakovskii class built in the Soviet Union. They were distributed equally among the largest Pacific Regional Fisheries Administrations: Primorskii Krai (the Aleksandr Kraev and the Ivan Chernopiatka), Sakhalin (the Valentin Kotelnikov and the Vasilii Vinevnikov), and Kamchatka (Petr Ovchinnikov and Boris Gorinskii). It is believed that most of the new additions will be used in fisheries off U.S. coasts.

Other recent additions to the Soviet Pacific Fishing Fleet include the Vasilii Putintsev, a 12,000-gross-ton floating factory of the Zakharov class (2 more are under construction at Leningrad Shipyards); a modern refrigerated fish carrier; the 6,400-gross-ton Bashkir, and 5 large fish-processing factoryships of the Spassk class (18,000 gross tons) bought from Japan.

* * * * *

FLAGSHIP RETURNS FROM
NORTHEASTERN PACIFIC

The fishing fleet flagship "Churkin" returned to Vladivostok on September 15, 1966, with 13,800 metric tons of fish (including 2,420 tons of Pacific hake) caught off the U.S. Pacific Northwest.

The Churkin left Vladivostok late in 1965, worked in the Sea of Okhotsk and, since May 1966, serviced the fleets fishing first Pacific perch and then hake off Oregon and Washington.

Aleksandr Chepur, Commander of the Soviet fleets operating off the Pacific Northwest, was aboard the Churkin.

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USSR (Contd.):

PACIFIC SQUID FISHERY IS PRODUCTIVE

A Soviet fleet was fishing for squid in the South Kurils in mid-1966. Like the shrimp fleet off the Shumagins, the squid fleet belongs to the Soviet state-owned DALMORPRODUKT firm. The firm operates principally in fisheries for export and is administratively attached to the Far Eastern Fisheries Administration. Catches were good--as much as 100 metric tons a night. Most of the squid will be exported to Japan. In July 1966, the firm received orders from Japanese importers for squid, sea urchins, and other marine invertebrates.

The Soviets are continuing their efforts to increase fishery exports by expanding into new fisheries yielding good export items. Recent examples of this trend are the Soviet fishery for spiny lobsters off S. Africa and shrimp in the Indian Ocean.

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FISHING IN BARENTS SEA IS POOR

Fishing vessels of the Northern Fisheries Administration at Murmansk reported extremely poor catches in August and September 1966. Two-thirds of all vessels, including most stern factory trawlers, fishing in the Barents Sea did not fulfill the August monthly catch quota. The Murmansk administrators decided to send most of the unproductive vessels to the Northwest Atlantic.

Conditions are better in the Norwegian Sea where Soviet medium side trawlers are taking excellent catches of herring with drift nets.

Soviet fishing troubles in the Barents Sea are probably due to years of overfishing. As a result, the USSR is planning increased research (alone and with other countries) and explorations for new resources.

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CAPELIN STOCKS IN BARENTS SEA ARE LARGE

Preliminary exploratory research off Hop- en Island (below Spitzbergen Islands) showed large concentrations of capelin, used principally for fish meal and bait by other coun-

tries. The Polar Scientific Research Institute for Fisheries and Oceanography (PINRO) believes that yearly catches of 300,000-400,000 metric tons can be landed. In 1964, the Soviets landed only 400 tons. The new resource was discovered through increased efforts to offset poor Soviet catches from the Barents Sea.

Norwegian landings of capelin were 217,000 tons in 1965; in the first 8 months of 1966, totaled over 300,000 tons.

* * * * *

RESEARCH VESSEL VISITS AUSTRALIA

The flagship of the Soviet Pacific fishery research fleet, "Akademik Berg," visited Melbourne, Australia, in early May 1966. The 3,800-gross-ton stern trawler, constructed in 1963, has a crew of 86 including 10 fishery scientists. The captain told an interviewer that the Soviets are interested in redfish and snapper, jackass fish, deep-sea travella, and various other fish. The Soviets have no interest in catching shark or spiny lobster.

The Captain also reported numerous sightings of tuna schools and believes that large tuna resources are available in the area. The Akademik Berg did not attempt to catch tuna because it lacked purse-seine equipment. (Melbourne Fish Trades, June 1966.)

Note: The Australian journal comments: "4 vessels of this type could land in a year the equivalent of the total annual Australian fisheries catch" (76,000 metric tons in 1964).

* * * * *

CONDUCTS HERRING RESEARCH IN BERING SEA

In early October 1966, the medium freezer trawler SRTM-8452 of the Pacific Scientific Institute for Fisheries and Oceanography (TINRO) sailed for a 6-month research cruise in the Bering Sea to study wintering herring concentrations and the biological principles governing their formation. This is the first time the Soviets have studied winter herring in the Bering Sea; heretofore, their research was conducted mainly in the Sea of Okhotsk and off Kamchatka, where large commercial herring concentrations occur in early fall.

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USSR (Contd.):

VESSELS RETURN FROM
PACIFIC RESEARCH CRUISE

In late August and early September 1966, two TINRO fishery research vessels, Adler and Iskatel¹, returned from extended cruises in the Eastern Pacific. The Adler conducted exploratory research from off British Columbia to Mexico to study saury, mackerel, Pacific ocean perch, sardines, hake, halibut, crustaceans, and various invertebrates. Research focused on environmental factors affecting the distribution, behavior, and formation of commercial concentrations of those species.

* * * * *

RED SEA RESOURCES STUDIED

The "Akademik Kovalevskii," an oceanography and research vessel of the Ukrainian Academy of Sciences, is continuing the research in the Red Sea begun two years ago. The principal scientific purpose of this expedition is to determine the relationship between the plant and animal life of the Red Sea and the Mediterranean and Black Seas. On its three-month cruise, from August through October 1966, the research vessel was scheduled to resupply at, or visit, the Red Sea ports of Yemen, Egypt, Sudan, and Somalia. They all receive Soviet fishery aid.



Denmark

DATE OF PRODUCTION TO BE REQUIRED
ON "SEMPRESERVED" FISH PRODUCTS

Changes in labeling requirements for "semipreserved" fish products to be sold in Denmark were announced by the Fishery Ministry, September 1, 1966. They become effective January 1, 1967. The production date on semipreserved retail packs, whether of domestic or foreign origin, will have to be specific rather than in code. The packs also must be specifically labeled "Semi-preserved." (Codes can still be used for date labeling of heat-processed sterile-canned packs.)

In Denmark, semipreserves are herring, caviar, mussels, etc., preserved for a limited

time with sugar, salt, acid, or other preservative (but does not include smoked, frozen, or dried products). (U. S. Embassy, Copenhagen, Sept. 21, 1966.)



East Germany

BEGINS FISHING ON
NORTHWEST ATLANTIC'S GEORGES BANK

A second large factory stern trawler, the "Willy Bredel," ROS-313, began operating on Georges Bank September 7-14, 1966. The first one, the ROS-312, began at the end of August. The research vessel "Ernst Haeckel" was at work off the mouth of Rio De La Plata, not far from Montevideo, Uruguay, in late September 1966.



Iceland

SETS EX-VESSEL PRICES
FOR SHRIMP, COD, HADDOCK, HERRING

Ex-vessel prices set by the Icelandic Fish Pricing Board for shrimp, cod, and haddock, September 16 to December 31, 1966 were:

| | Prices | | | |
|--|----------|---------|------------|---------|
| | Kr./kilo | | US¢/lb. | |
| Shrimp in the shell 1/ | 8.85 | | 9.32 | |
| | Cod 2/ | | Haddock 3/ | |
| | Kr./kilo | US¢/lb. | Kr./kilo | US¢/lb. |
| Cod and Haddock: | | | | |
| 1st Grade-A: | | | | |
| guttled, head-on . . . | 3.97 | 4.18 | 4.40 | 4.63 |
| unguttled | 3.41 | 3.59 | 3.70 | 3.90 |
| 1st Grade-B: | | | | |
| guttled, head-on . . . | 3.43 | 3.61 | 3.80 | 4.00 |
| unguttled | 2.95 | 3.11 | 3.26 | 3.43 |
| 2nd Grade: | | | | |
| guttled, head-on . . . | 2.67 | 2.81 | 2.96 | 3.12 |
| unguttled | 2.30 | 2.42 | 2.54 | 2.67 |
| 1/Minimum size 350 a kilo (159 a pound). | | | | |
| 2/Size 40-57 cm. (about 16-22 inches). | | | | |
| 3/Size 40-50 cm. (about 16-20 inches). | | | | |
| Note: Prices based on standards fixed by quality inspectors. | | | | |

The Icelandic Pricing Board also established minimum ex-vessel prices for October 1, 1966, to February 28, 1967, for herring caught along south and west coasts of Iceland. Prices are:

| | Price | |
|--|----------|---------------|
| | Kr./Kilo | U.S. Cent/lb. |
| Herring for salting, freezing, & canning. | 1.70 | 1.79 |
| Iced herring | 1.55 | 1.63 |

Iceland (Contd.):

Minimum ex-vessel price set for herring sold for reduction October 1-31, 1966, was 1.12 kronur per kilogram (1.18 U. S. cents a pound). (U. S. Embassy, Reykjavik, Oct. 6 and 13, 1966.)

Note: Icelandic kronur 43.06 equals US\$1.00.

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FISHERY PRODUCTS EXPORTS PRESENT UNEVEN PICTURE

During January-April 1966, Iceland sharply increased exports of fish meal and oil compared with the same period in 1965, according to the periodical *Hagtidinid*, May 1966. But exports of frozen fish fillets and stockfish decreased in the first 4 months of 1966.

HOW FISH WERE USED

| How Utilized | Jan.-Mar. | |
|--|---------------------|--------|
| | 1966 | 1965 |
| | .. (Metric Tons) .. | |
| Herring and Capelin^{1/} for: | | |
| Oil and meal | 135,814 | 82,955 |
| Freezing | 2,919 | 10,973 |
| Salting | 1,452 | 3,137 |
| Fresh on ice | 937 | 546 |
| Groundfish^{2/} for: | | |
| Fresh on ice | 10,033 | 12,833 |
| Freezing and filleting | 40,274 | 54,682 |
| Salting | 25,603 | 34,297 |
| Stockfish (dried unsalted) | 18,416 | 19,758 |
| Canning | 2 | 17 |
| Oil and meal | 484 | 493 |
| Crustaceans for: | | |
| Freezing | 710 | 303 |
| Canning | 11 | 91 |
| Home consumption | 3,273 | 3,645 |
| 1/Whole fish. | | |
| 2/Drawn fish. | | |
| Source: Aegir, June 1966. | | |

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LABOR-SAVING MACHINERY MEETS NEED

The shortage of labor has created a strong demand for labor-saving machinery. This may provide marketing opportunities for U. S. suppliers of fish-processing machinery. Also, U. S. processors may be interested in some new equipment developed in Iceland. Two machines were designed to clean lobster and trout:

Lobster Processing: A cleaning (gutting) machine can be operated by 4 women and equal the productivity of 16 women working by hand. Over an average 10-hour period, 1,800 kilograms (3,968 pounds) of lobster were cleaned and sorted.

The inventor is Sigmundur Johannson. Sales distribution will be handled by Arni Olafsson & Co., Sudurlandsbraut 12, Reykjavik, Iceland. Johannson is modifying the prototype and expects to have more detailed information and a brochure available on the improved machinery in late 1966.

Trout Processing: A machine that will wash and clean lake trout is being tested at a cannery. On a trial run, about 50 kilograms (110 pounds) of trout were processed. Between 80-90 percent of the processed trout emerged satisfactory for canning. The machinery, during the trial period, handled 50 trout a minute; with experienced operators, 70 trout a minute can eventually be processed.

| Exports of Selected Fishery Products, January-April 1965-1966 | | | | | | |
|--|----------------|--------------|------------|----------------|--------------|------------|
| Product | Jan.-Apr. 1966 | | | Jan.-Apr. 1965 | | |
| | Qty. | Value f.o.b. | | Qty. | Value f.o.b. | |
| | Metric Tons | 1,000 Kr. | US\$ 1,000 | Metric Tons | 1,000 Kr. | US\$ 1,000 |
| Salted herring | 11,348 | 141,233 | 3,280 | 8,636 | 87,805 | 2,039 |
| Other salted fish | 4,695 | 94,287 | 2,190 | 9,180 | 161,264 | 3,745 |
| Stockfish | 2,481 | 78,978 | 1,834 | 3,708 | 108,129 | 2,511 |
| Herring, frozen | 12,926 | 83,667 | 1,943 | 12,965 | 82,505 | 1,916 |
| Fish fillets, frozen | 11,540 | 318,599 | 7,399 | 15,936 | 373,219 | 8,667 |
| Shrimp & lobster, frozen | 269 | 29,829 | 693 | 136 | 13,349 | 310 |
| Fish and whale oil | 36,796 | 289,401 | 6,721 | 20,063 | 170,142 | 3,951 |
| Fish meal | 47,591 | 377,612 | 8,769 | 32,334 | 219,555 | 5,099 |
| Note: Values converted at rate of 1 krona equals 2.32 U. S. cents. | | | | | | |

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REPORTS LANDINGS BY PRINCIPAL SPECIES, JANUARY-MARCH 1965 & 1966

| Species | Jan.-Mar. | |
|--|---------------------|---------|
| | 1966 | 1965 |
| | .. (Metric Tons) .. | |
| Cod | 73,249 | 80,659 |
| Haddock | 8,669 | 21,123 |
| Saithe | 5,968 | 12,007 |
| Ling | 1,520 | 2,100 |
| Wolfish (catfish) | 3,821 | 3,140 |
| Cusk | 948 | 1,145 |
| Ocean perch | 2,468 | 4,634 |
| Halibut | 154 | 175 |
| Herring | 17,394 | 48,815 |
| Capelin | 123,742 | 48,797 |
| Shrimp | 721 | 394 |
| Other | 1,289 | 742 |
| Total | 239,943 | 223,731 |
| Note: Except for herring, which are landed round, all fish are drawn weight. | | |

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Iceland (Contd.):

The inventor is Baldvin Jonsson, Sylgia Velavidgerdir, Laugavegur 27, Reykjavik, Iceland. The only machine in existence was designed for the Icelandic cannery Kjot og Rengi H. F., Karnesbraut 86, Kopavogur, Iceland. (U. S. Embassy, Reykjavik, Sept. 15 and Oct. 13, 1966.)



Italy

DUTY-FREE FROZEN TUNA QUOTA CHANGE SOUGHT

The tuna industry has asked the government to begin negotiations immediately to have the present restrictions on frozen tuna imports liberalized. In 1965, following negotiations at Brussels with other European Common Market (EEC) nations, Italy was permitted to (1) import from non-EEC countries 14,000 metric tons of frozen tuna duty free; and (2) assess an ad valorem duty of 0.5 percent for tuna imports between 14,000-40,000 metric tons, and 15 percent over 40,000 tons.

Beginning in 1970, Italy is to adopt an EEC common external tariff policy. Then, under the Common Market tariff schedule, she will be permitted to import 14,000 tons of tuna duty free--but must assess an ad valorem duty of 35 percent for imports exceeding that amount. Imposition of such a high tariff is expected to seriously hurt the Italian tuna canning industry, which presently imports about 40,000 tons of tuna a year, mostly from Japan. For this reason, the industry wants to have the 14,000-ton duty-free quota raised to 40,000 tons. (Nihon Suisan Shimbun, Sept. 1966.)

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FROZEN TUNA MARKET IMPROVES

The frozen tuna market showed some signs of improvement beginning in September, according to a report in the Japanese periodical Suisan Tsushin, September 21, 1966. Frozen yellowfin tuna (dressed with tail) was said to be bringing c.i.f. (including 3-percent commission) US\$570-580 a metric ton, with some buy offers at \$590 a ton. The market improvement was attributed to "normalization"

of sales to the United States and increasing need for tuna in Japan.



Portugal

CANNED FISH PACK AND EXPORTS DROP

Due to a smaller pack of tuna, the pack of canned fish in oil or sauce during first-half 1966 was down 12 percent in weight from first-half 1965. The important sardine pack remained at the same level.

| Canned Fish Pack, Jan. -June 1966 | | | | |
|-----------------------------------|---------------|-------------|---------------|--------------|
| Product | 1966 | | 1965 | |
| | Jan. -June | | Jan. -June | |
| | Metric Tons | 1,000 Cases | Metric Tons | 1,000 Cases |
| In oil or sauce: | | | | |
| Sardines | 9,122 | 480 | 9,181 | 483 |
| Chinchards | 248 | 13 | 501 | 26 |
| Mackerel | 2,074 | 83 | 2,071 | 82 |
| Tuna & tunalike | 2,274 | 76 | 4,157 | 138 |
| Anchovy fillets | 2,977 | 298 | 2,457 | 246 |
| Others | 508 | 27 | 1,194 | 63 |
| Total | 17,203 | 977 | 19,561 | 1,038 |

Canned Fish Exports Are Down

Exports of canned fish in oil or sauce in first-half 1966 were down about 5 percent from first-half 1965. A drop in sardine exports was partly offset by larger shipments of canned mackerel, tuna, and anchovy fillets.

| Canned Fish Exports, Jan. -June 1966 | | | | |
|--------------------------------------|---------------|--------------|---------------|--------------|
| Product | 1966 | | 1965 | |
| | Jan. -June | | Jan. -June | |
| | Metric Tons | 1,000 Cases | Metric Tons | 1,000 Cases |
| In oil or sauce: | | | | |
| Sardines | 24,052 | 1,266 | 28,371 | 1,493 |
| Chinchards | 216 | 11 | 515 | 27 |
| Mackerel | 4,367 | 175 | 2,076 | 83 |
| Tuna & tunalike | 1,462 | 49 | 1,072 | 36 |
| Anchovy fillets | 1,958 | 196 | 1,575 | 158 |
| Others | 391 | 20 | 361 | 19 |
| Total | 32,446 | 1,717 | 33,970 | 1,816 |

Portugal's principal canned fish buyers in first-half 1966 were: Italy, 5,556 metric tons; United Kingdom, 4,534 tons; Germany, 3,339 tons; France, 2,814 tons; the United States, 2,744 tons; and Belgium-Luxembourg, 2,633 tons. Germany's purchase of canned fish in first-half 1966 dropped 55 percent from first-half 1965. (Conservas de Peixe, Aug. 1966.)



Spain

REVISES LABEL RULES FOR IMPORTED FOODS

Spain has revised label requirements, effective November 5, 1966, for imported processed food products to be sold there. They apply to preserved, semipreserved, and salted fishery products, and require the following information in Spanish on the container or on attached label:

(1) Country of origin; (2) Usual common name of preserved product in letters not less than 3 millimeters (mm.) high; (3) Forms of preparing preserved product in letters not less than 2 mm. high, i.e., "in sauce," "with tomato," "with brine," "in pure olive oil," "in seed oil," "in natural state," "in simple syrup," etc.; (4) All ingredients of the preserved product should be listed according to order of importance; (5) Additives, such as coloring materials, antioxidation products, preservers, etc.; (6) Net minimum weight expressed in units of metric system; (7) Instructions, if required, for use or preparation of preserved or prepared product; (8)

For seimpreserved fish products, in Spanish and visible, the phrase "semiconserva, mantengase en sitio fresco" (semipreserve, store in a cool place), with month and year of manufacture.

Additional information in other languages will be permitted if it does not contradict or confuse the Spanish text. The letters of other languages may be smaller. (U. S. Embassy, Madrid, Oct. 1, 1966.)



United Kingdom

FIRM FREEZES PRICE FOR COD FILLETS

On August 30, 1966, a large British firm announced that its basic prices for frozen cod fillets would remain unchanged for the 12-month contract period beginning October 6, 1966.



U. S. COAST GUARD AND ENFORCEMENT OF INTERNATIONAL FISHERIES TREATIES

Enforcement of international treaties to preserve valuable marine resources in North American waters is a traditional function of the U. S. Coast Guard. Partly due to Coast Guard efforts, the valuable seal herd on the Pribilof Islands off Alaska is thriving once again. Those animals were on the verge of extinction at the turn of the century by Americans and foreign hunters. The same holds true for valuable species of fish to which the world may turn to more and more as it seeks new sources of high-quality protein.

Three Coast Guard officers in May 1965 boarded the Soviet tug Stremitelniy at Halifax to undertake a first-hand observation of Soviet law-enforcement techniques in the Grand Banks area. Later that month, three Russian officers boarded the Coast Guard cutter Acushnet for a similar period of observation. Following the observation, they were taken on a tour of the U. S. Bureau of Commercial Fisheries and of Coast Guard law enforcement units in the vicinity of Boston, Mass. Those activities were conducted under the International Convention for Northwest Atlantic Fisheries (ICNAF). (Release No. 16-65, U. S. Coast Guard, Washington, D. C.)

ASIA

Japan

IMPORTS OF MARINE PRODUCTS ARE RISING

From 1962-1965, Japan increased her imports of marine products:

| Country of Origin | 1965 | 1964 | 1963 | 1962 |
|---------------------------|-------------|--------|-------|-------|
| | (US\$1,000) | | | |
| Korea Republic | 15,995 | 15,916 | 8,328 | 7,439 |
| Communist China | 18,222 | 16,052 | 7,213 | 3,218 |
| Peru | 8,222 | 11,128 | 8,041 | 3,517 |
| Mexico | 10,374 | 9,623 | 7,755 | 2,022 |
| United States | 7,149 | 5,935 | 3,454 | 1,471 |
| Hong Kong | 5,838 | 3,844 | 5,302 | 1,572 |
| Spain | 5,764 | 2,790 | 1,188 | 14 |
| South Africa | 5,146 | 2,631 | 2,679 | 715 |
| Australia | 3,314 | 3,130 | 2,164 | 708 |
| Thailand | 3,902 | 3,052 | 1,186 | 94 |
| USSR | 4,389 | 2,722 | 659 | 149 |

The data show significant increases in imports from Republic of Korea, Communist China, Thailand, and the USSR from 1963 to 1964, and for Spain between 1964 and 1965. Imports from the United States show a somewhat steady increase over the four years. (Fishery Attaché, United States Embassy, Tokyo, Oct. 5, 1966.)

At its first meeting, the National Council of Fisheries Organizations for the Import of Marine Products considered a law to regulate the import of marine products by using an import quota system on certain designated products. The problem will be discussed further.

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EMPLOYMENT DROPS IN FISHING INDUSTRY

The 1965 Japanese fishing industry dropped in number of establishments, fishing vessels, and employment, according to the Ministry of Agriculture and Forestry, Statistics Division:

| Item | 1965 | 1964 | Change from 1964 |
|---|---------|---------|---------------------|
| | No. | No. | % |
| Establishments engaged in marine fisheries and culture | 293,000 | 297,000 | -1.3 |
| Fishing vessels | 316,000 | 320,000 | -1.4 |
| Workers | 880,000 | 895,700 | -1.8 |

At least part of the reason for the declines is the fishing industry's move to increase the efficiency of operations and cut labor costs through automation, and by con-

solidation of vessels, facilities, and other operations. (Fishery Attaché, U. S. Embassy, Tokyo, Oct. 4, 1966.)

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CATCHES OF SQUID, MACKEREL, AND SAURY DECLINE

The 1966 catches of squid, mackerel, and saury, 3 of the most important coastal fish of Japan, are expected to be low:

Squid--generally less than last year, especially in the Japan Sea off Hokkaido.

Mackerel--less than last year, due primarily to the fish being farther from shore (associated with the area of warm water found farther offshore this year) and a decrease in the general abundance of fish.

Saury--as of end of September, catch was 100,000 metric tons, and the fleet was expected to catch 100,000 tons more in October. There is very little chance that the 300,000-ton goal will be reached this year.

The forecast of poor catches for these 3 species will probably be reflected in increased prices and perhaps some increase in imports to meet local demand and export commitments.

Horse mackerel--very poor catches of horse mackerel in August were reported in western Japan. Landings of mackerel and horse mackerel at Shimonoseki during August were only 6,500 metric tons (just half the amount landed in August of the previous year). September landings appeared to be no better. The shortage is especially critical for the minced meat processors in western Japan who depend on horse mackerel for their main source of supply. Most of the processors are idle because of the lack of fish and the associated high price.

The failure of the fisheries does not appear to be associated with abnormal weather or sea conditions. Because of the demand for minced meat by the Japanese processors for the various fish paste products, it is expected that the shortage will result in an increase in the import of fish from the Republic of Korea, the USSR, and other neighboring countries.

Japan (Contd.):

(Fishery Attaché, U. S. Embassy, Tokyo, Oct. 6 and 7, 1966.)

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FACTORYSHIPS RETURNING FROM EASTERN BERING SEA

Japanese factoryships operating in the Eastern Bering Sea have been returning to Japan with their products:

● The 10,000-ton "Gyokei Maru" fleet reported a catch of 108,041 metric tons, which yielded: fish meal, 17,331 tons; fish solubles, 1,442 tons; fish oil, 576 tons; frozen fish, 4,896 tons; and minced meat, 1,013 tons.

● The catch for 1966 season for the 7,400-ton "Chichibu Maru" was: Pacific ocean perch, 13,000 metric tons; herring, 3,000 tons; other fish, 2,500 tons--a grand total of 18,500 tons.

● The production of shrimp by the 7,500-ton "Einin Maru" was only 145,000 cases of 48 6½-oz. cans (about half original target). The low production of shrimp in the North Pacific and Bering Sea was contributing to the rise in export price of this commodity. (Fishery Attaché, U. S. Embassy, Tokyo, Oct. 7, 1966.)

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FISH MEAL FACTORYSHIP COMPLETES NORTH PACIFIC OPERATION

The "Hoyo Maru," a Japanese fish-meal factoryship, completed fishing operations in the North Pacific on September 26. Its production was:

| | Metric Tons |
|------------------------------------|-------------|
| Total catch | 95,500 |
| Meal produced | 14,860 |
| Solubles produced | 3,120 |
| Fish oil produced | 970 |
| Frozen products produced | 5,733 |

Included in the frozen products were 1,200 metric tons of minced meat. (Fishery Attaché, U. S. Embassy, Tokyo, Oct. 4, 1966.)

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1966 WHALE CATCH IN NORTH PACIFIC WAS GOOD

North Pacific whaling in 1966 brought good results. The fleets all reported abundant sei and sperm whales and no reason to fear for their future. The fleets made the best kills in two areas: between 45° N. and 49° N. in the eastern Pacific, and between 45° N. and 53° N. in the Gulf of Alaska. Those areas had rarely been fished in the past. The catches for one of the three fleets, the "No. 2 Kyo-kuyo Maru," were:

| Month | Sei Whales | Sperm Whales |
|---------------------|--------------------------|--------------|
| | (Number) | |
| May | 28 | 71 |
| June | 235 | 355 |
| July | 652 | 194 |
| August | 469 | 308 |
| September | 233 | 1 |
| Total | 1,617 | 929 |

In previous years, most Japanese whaling was in the Aleutian area or in the Western Pacific, but those grounds no longer are providing good catches. This year, the best fishing was in the eastern Pacific off Canada and in the Gulf of Alaska. This is a relatively new area and no doubt the reason for the good catches. (Fishery Attaché, U. S. Embassy, Tokyo, Oct. 6, 1966.)

* * * * *

EXPORTS 1¼ MILLION CANNED TUNA IN OIL AND SPECIALTY PACKS

The Japan Canned Tuna Packers Association, during April-August 1966, validated for

| Exports of Canned Tuna by Countries, April-August 1966 | | |
|--|--------------------------------|----------------|
| Countries | Tuna in Oil | Specialty Pack |
| | . . . (No. Actual Cases) . . . | |
| Exported to: | | |
| West Germany | 304,553 | 171,982 |
| Canada | 115,831 | - |
| Netherlands | 63,801 | 30,495 |
| Switzerland | 57,000 | - |
| Aden | 56,053 | - |
| Lebanon | 51,491 | - |
| Belgium | 49,759 | 28,460 |
| Okinawa | 31,714 | - |
| Saudi Arabia | 15,436 | - |
| United Kingdom | 14,763 | 10,000 |
| Kuwait | 14,522 | - |
| Italy | 10,333 | - |
| Others | 194,441 | 17,096 |
| Total | 979,697 | 258,033 |

Japan (Contd.):

export 979,697 actual cases of canned tuna in oil, and 258,000 actual cases of specialty pack tuna. Some best sellers in the specialty pack were: tuna in vegetable, 204,207 actual cases; tuna in jelly, 26,273 cases; skipjack, natural, 2,500 cases; and creamed tuna, 11,420 cases. (Suisan Tsushin, September 21, 1966.)

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EXPORTS OF FRESH AND FROZEN TUNA DECLINE

Fresh and frozen tuna validated for export by the Japan Frozen Foods Exporters Association in August 1966 totaled 14,986 metric tons, compared to 16,869 tons in August 1965. Exports for April-August 1966 totaled 75,870 metric tons, compared to 83,312 tons for the same 1965 period. (Suisancho Nippo, September 22, 1966, and other sources.)

EXPORTS OF CANNED KING CRAB GOOD BUT SUPPLIES INADEQUATE

Exports of canned king crab were good this year. At the end of August, shipments were:

| Destination | No. of Cases ^{1/} |
|---|----------------------------|
| France | 31,000 |
| United States | 15,000 |
| Great Britain | 15,000 |
| Belgium | 2,100 |
| Netherlands | 2,000 |
| Australia | 950 |
| Other | 3,850 |
| Total | 69,900 |
| ^{1/} 48 No. 2 cans of fancy pack per case. | |

Various reports indicate that the export trade is receiving strong competition from domestic sales. The quantity allocated for export this year is reported small. (Suisan Keizai Shimbun, Sept. 13, 1966.)

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FISH OIL PRODUCTION UP IN 1965

Production of fish oil in 1965 totaled an estimated 30,000 metric tons. It was only slightly under the 5-year average (1961-1965) of 30,800 metric tons. Perhaps most significant was the recovery of oil production from the lows of 25,218 and 22,503 metric tons in 1963 and 1964, respectively. Most oils from the various fish have decreased over the five years--except from sardine, cod, and Alaska pollock. The biggest increase in 1965, however, was in oil from unidentified species, including oil from fish livers. (Fishery Attaché, U. S. Embassy, Tokyo, October 21, 1966.)

Table 1 - Fresh and Frozen Tuna Exports, August 1966

| | Exported to: | | | Total |
|--|--------------------|----------------|-------------------|-----------------|
| | United States | Overseas Bases | Other Countries | |
| | .. (Short Ton) . . | | .. (Metric Ton) . | |
| Tuna: | | | | |
| Albacore 1/ | 4,793.2 | 901.8 | 329.0 | 5,494.3 |
| Yellowfin 2/ | 1,790.5 | 338.0 | 5,224.3 | 7,154.9 |
| Big-eyed 2/ | 135.2 | 145.7 | 921.0 | 1,175.7 |
| Skipjack 1/ | 293.2 | - | 60.0 | 325.9 |
| Bluefin 2/ | - | - | 268.2 | 268.2 |
| Tuna loins | 625.0 | - | - | 567.0 |
| Total | 7,637.1 | 1,385.5 | 6,802.5 | 14,986.0 |
| ^{1/} Round fish. | | | | |
| ^{2/} Gilled and gutted, dressed, and fillets. | | | | |

Table 2 - Fresh and Frozen Tuna Exports, April-August 1966

| | Exported to: | | | Total |
|--|--------------------|----------------|-------------------|---------------|
| | United States | Overseas Bases | Other Countries | |
| | .. (Short Ton) . . | | .. (Metric Ton) . | |
| Tuna: | | | | |
| Albacore 1/ | 23,007 | 5,602 | 1,925 | 27,873 |
| Yellowfin 2/ | 17,613 | 3,195 | 14,610 | 33,483 |
| Big-eyed 2/ | 1,439 | 630 | 5,279 | 7,156 |
| Skipjack 1/ | 4,596 | 9 | 336 | 4,513 |
| Bluefin 2/ | - | - | 833 | 833 |
| Tuna loins | 2,218 | - | - | 2,012 |
| Total | 48,873 | 9,436 | 22,983 | 75,870 |
| ^{1/} Round fish. | | | | |
| ^{2/} Gilled and gutted, dressed, and fillets. | | | | |

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Production of Fish Oil by Species, 1961-1965

| Types of Oil by Species | ^{2/} 1965 | 1964 | 1963 | 1962 | 1961 |
|--|----------------------------|---------------|---------------|---------------|---------------|
| | .. (Metric Tons) | | | | |
| Sardine | 1,000 | 117 | 578 | 838 | 923 |
| Herring | - | 1 | 1 | 8 | 31 |
| Atka mackerel | 500 | 1,031 | 864 | 681 | 2,372 |
| Flatfish | 100 | 46 | 73 | 100 | 171 |
| Saury | 2,000 | 2,892 | 7,685 | 18,877 | 11,032 |
| Squid | 1,700 | 508 | 2,663 | 3,181 | 2,967 |
| Shark | 1,000 | 1,142 | 1,266 | 2,201 | 2,247 |
| Cod-Alaska pollock | 8,000 | 8,548 | 6,026 | 7,771 | 6,743 |
| Other fish ^{1/} | 15,700 | 8,218 | 6,062 | 8,681 | 7,358 |
| Total | 30,000 | 22,503 | 25,218 | 42,338 | 33,844 |
| ^{1/} Other fish oil includes liver oil. | | | | | |
| ^{2/} Figures for 1965 are estimates of Japan Aquatic Oil Association. | | | | | |

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Japan (Contd.):

EXPORT PRICE IS UP
FOR CANNED SHRIMP

An increase in the export price of canned shrimp was announced by a leading Japanese producer. The new prices are:

| Can Size | No. in Case | Kind | Price Per Case | Amount of Increase |
|----------|-------------|--------|----------------|--------------------|
| | | | US\$ | US\$ |
| No. 2 | 24 | Mixed | 9.00 | 0.50 |
| No. 3 | 48 | Mixed | 10.80 | 0.60 |
| No. 2 | 24 | Broken | 8.00 | 0.50 |
| No. 3 | 48 | Broken | 9.60 | 0.60 |

Of the 150,000 cases (No. 2 - 24/case) produced this year, about 50,000 cases were sold at the first sale. At the second sale, 50,000 cases were offered at a higher price and were sold to the United Kingdom and France with no difficulty. So it is felt that the remaining 50,000 cases can be sold at the prices quoted. (Fishery Attaché, U.S. Embassy, Tokyo, Oct 7, 1966.)

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SALMON ROE PRICES DROP

Prices in Japan of salmon roe imported from the United States and Canada have dropped. Imports in early October totaled about 2,400 tons (2,100 tons from U. S.; 300 tons from Canada); they exceed the original forecast of 2,000 tons. At least part of the increase was due to a good catch of pink salmon in southern Alaska. Further, a prediction of strong domestic demand for roe had been based principally on the increased income of farmers enjoying a good rice harvest. This demand had not helped, possibly because of the sudden increase in September imports.

The retail price of top-quality salmon roe was about US\$1.90 a pound for pink, about \$2.00 for chum, and \$1.75 to \$1.90 for red. Second- and third-grade roe sold 25¢ to 50¢ lower. Those prices are about 15 percent below those reported at the beginning of September.

Reasons for Price Drop

The price drop was attributed to two factors: This year's quality is inferior to last year's, especially for pink salmon roe: the first-grade product this year is equivalent to last year's second-grade product. Second,

around 1,700 tons of pink roe have been imported so far this year and only half has been sold. Some traders are beginning to dump salmon roe on the market, forcing the price down.

U. S. and Canadian production and export of salmon roe to Japan has increased rapidly during the past 2-3 years. A supply of 2,000 tons is reported to be optimum. Some in the industry feel that market conditions were due to the sudden influx of roe and that better-timed deliveries would not have depressed prices. (Fishery Attaché, U. S. Embassy, Tokyo, October 4, 1966.)

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EXPORTS OF CANNED KING CRAB
TO UNITED KINGDOM DROP

Japan will export less than 40,000 cases (48 7-oz. cans) of canned king crab to the United Kingdom in 1966. Originally, 45,000 cases had been allocated for export.

Part of the reason for this small amount is the exceptionally strong domestic demand for king crab--another reflection of increasing Japanese demand for their own higher-priced fish products. (Fishery Attaché, U. S. Embassy, Tokyo, Oct. 7, 1966.)

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U. S. MARKET FOR
CANNED TUNA WEAKENS

The United States market for Japanese canned tuna shows signs of weakening, according to the chief of the Tuna Division, Japan Canned Goods Export Association, who visited the U. S. September 5-25, 1966.

This was his evaluation of the American market: the average price of Japanese canned tuna this year is a little higher than last year; the amount sold will be less, increasing the inventory in Japan; the Japanese high cost of fish will not allow a price cut; American supermarkets are selling tuna at a fairly low price, and it is difficult to move Japanese tuna because of the high price (Japan must maintain her share of the market); and the Japanese large can is no longer superior in quality to the American pack; since U. S. companies are making a greater effort to sell their product, Japanese companies should not expect as many sales in the future.

Japan (Contd.):

This report reflects the economic problem Japan now faces, because of high labor and other production costs, in meeting competition in foreign markets. (Fishery Attaché, U. S. Embassy, Tokyo, October 5, 1966.)

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CANNED SAURY TO BE SOLD TO UNITED STATES

In spring 1966, 250,000 cases of horse mackerel were exported to the United States and an additional order of 300,000 cases could not be filled. Instead Japan shipped 100,000 cases of mackerel to the United States.

Many trading companies are considering the export of canned saury to the United States to supplement mackerel. The U. S. public does not know saury, but it is similar to the sardine in quality, taste, and appearance, and so Japanese interests feel that they should be able to develop a good market for it. Much of the canned saury now goes to Southeast Asian countries. (Fishery Attaché, U. S. Embassy, Tokyo, Oct. 7, 1966.)

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HAKE GAINING CONSUMER ACCEPTANCE

Hake ("merluza") caught off South Africa is gaining consumer acceptance in Japan, states a report from Shimonoseki, southern Japan, the home base of many large trawlers operating in the South Atlantic. Restrictions imposed by importing countries to protect their fisheries and fishing industry have made it difficult for Japan to export "merluza" to Europe, where demand is good. As a result, the trawlers operating in the Atlantic are compelled to ship their catches (dressed and filleted) to Japan.

Hake was not well known in Japan but, beginning in late 1965, firms began to promote it aggressively. The promotion appears to be a success. Despite increased shipments to Japan, consumption has increased, and the price landed in Japan is holding above 100,000 yen a metric ton (12.6 U. S. cents a lb.). (Nihon Suisan Shimbun, September 21, 1966.)

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TO CULTIVATE PEARLS IN FIJI ISLANDS

The Fiji Government has given a Japanese company a five-year license to cultivate pearls at Vukanicuku Bay, Gau Island. (Pacific Islands Monthly, July 1966.)

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JOINT WHALING VENTURE WITH NORWAY UNDER WAY

A major Japanese whaling fleet left November 1 on a joint venture with a Norwegian company. The Japanese fleet consists of the mothership "Koyo Maru" and 5 catcher boats. Also, the "No. 2 Banshu Maru" was chartered to the Norwegians. The charter rate this year is about US\$890,000, about \$280,000 higher than last year. The Japanese are entering such joint undertakings to overcome their short supply of whale meat resulting from the decrease in Antarctic whale production. (Fishery Attaché, U. S. Embassy, Tokyo, Oct. 4, 1966.)

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HOKKAIDO IS REBUILDING SALMON RUNS

The Hokkaido salmon fishery opened September 1 and the catches were good. Officials predicted that the run will approximate the same high level of the past three years, probably second only to the high year of 1965. The expected total run was about 4,000,000 fish, of which 620,000 were to be allowed to escape for spawning--to produce about 620 million eggs.

The Fishery Agency plans to stock experimentally red salmon fry in the Nishibetsu River near Nemero, Hokkaido. In 1960, 50,000 kokanee fry were released in the Nishibetsu River; in 1964, 5 or 6 parent red salmon returned to spawn. Encouraged by the return, the Agency will release annually 200,000 fry for the next five years. Fry are held for one year at the hatchery before release. If the study proves successful, the Agency plans to expand the plants to other rivers by using eggs purchased from Alaska, or other sources if necessary. (Fishery Attaché, United States Embassy, Sept. 20, and Oct. 4, 1966.)

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Japan (Contd.):

COMMUNIST CHINA
FISHERIES TEAM VISITS

On September 27, 1966, a fisheries team from Mainland China arrived in Tokyo for a visit sponsored by the Japan-Mainland China Friendship Society. The team will inspect fisheries facilities (principally in western Japan) and talk with representatives of the fishing industry and unions.

Japanese fishery circles are cooperating. They hope this will assist them in implementing the private Japan-Communist China Fisheries Agreement, prevent fishery disputes in the East China Sea, and increase fishery trade with China. (Nihon Suisan Keizai, Sept. 27, 1966.)

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IMPORTS FROM CHINA ROSE IN 1965

Imports of Chinese fishery products into Japan increased from about 18,840 metric tons in 1964 to over 28,130 tons in 1965. Imports of the largest single item--fresh and frozen shrimp--remained relatively stable (5,480 tons in 1964; 5,874 tons in 1965), but their value was two-thirds of the total value of all Japanese fishery imports from Communist China.

The largest quantity increases in 1965 were imports of Spanish mackerel and hairtails (both triple 1964 imports) and croakers (50 per cent higher than 1964). The Japanese are especially anxious to increase imports of large shrimp for transshipment to world markets.



Republic of Korea

REPORT ON TUNA FLEET

South Korea's Atlantic tuna fishing fleet consists of 44-government-owned vessels with a gross tonnage of over 11,000 tons (see table). Vessels are based at Monrovia (Liberia) and Freetown (Sierra Leone). The Republic of Korea (ROK) now has the largest single group of tuna vessels fishing the South Atlantic. The tuna are sold to a large United States tuna packer. In 1967, another 6-11 vessels with a total tonnage of over 2,000 gross tons will be added.

| Type of Vessel | Number | Total Gross Tonnage |
|---------------------------|--------|---------------------|
| <u>Government owned:</u> | | |
| 150 gross tons. | 32 | 4,800 |
| 530 gross tons. | 12 | 6,360 |
| Privately owned | 5-7 | n. a. |

The ROK tuna vessels are owned by the Fisheries Corporation of the Republic of Korea. They were constructed with credits obtained from the French-Italian consortium.

In addition to government-owned vessels, private tuna companies operate from 5 to 7 vessels in the Atlantic.

Three 200-gross-ton ROK tuna vessels fish in the Indian Ocean.

Off American Samoa, 46 ROK tuna vessels operated in August 1966; 29 fish for one of the two U. S. tuna packers with plants on the Island; 17 fish for the other. (U. S. Embassy, Tokyo, October 7, 1966.)

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NORWAY AND NETHERLANDS
PROMISE CREDITS

O Chung-Kun, ROK's Director of the South Korean Office of Fisheries, reported in Seoul on September 22, after a money-raising trip to Western Europe, that: the Norwegian Government had agreed to encourage private commercial loans for Korean fishery development totaling US\$15-20 million; the Dutch Government will "support" the extension of a long-term loan of up to US\$15 million to finance Korean purchases of motherships and stern trawlers; the French-Italian consortium, which has financed recent Korean purchases of fishing vessels, was asked for an extension of the repayment period and additional credits.

In 1965, the Netherlands constructed a large 6,000-gross-ton mothership for North Korea, which is reportedly fishing with the Soviets in the Sea of Okhotsk--possibly for king crab or herring.

A group of Norwegian businessmen and fishery specialists is planning to visit Seoul to inspect Korea's growing fishing industry. The Norwegians were reported interested in promoting joint-investment in fishmeal processing plants and fishing vessel repair and shipbuilding yards. (U. S. Embassy, Seoul, Oct. 5, 1966.)

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Republic of Korea (Contd.):

NEGOTIATES FOR SECOND FISHERY LOAN FROM ITALIAN-FRENCH CONSORTIUM

To avoid relying too heavily on Japan in the import of fishing vessels, ROK is negotiating for a second Franco-Italian loan totaling \$20 million.

The first Franco-Italian fisheries loan program is valued at \$45,750,000. During the current negotiations for the second loan program, ROK will try to ease terms of the first loan. For the second loan, it proposes that the repayment period should be 10 years, the period guaranteeing the efficiency of the boats concerned should be 24 months, and the spare parts valued at \$150,000 should be in grants. (Korean Business Review, Sept. 1966.)

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FISHERY EXPORTS ARE RISING

During January-August 1966, South Korea exported 25 percent more fishery products (US\$22.1 million) than during the same period in 1965 (US\$17.6 million). The increase resulted mainly from greater landings made possible by new vessels and the modernization of the fishing industry. (U.S. Embassy, Seoul, Sept. 22, 1966.)

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VESSEL RETURNS FROM NORTH PACIFIC SURVEY

The ROK fisheries research and training vessel, "Baek Kyung Ho," was scheduled to arrive at Tokyo September 25 en route to her home port of Pusan. The vessel explored fishing grounds in the eastern Bering Sea and North Pacific. It was reported that data collected will be analyzed to determine the feasibility of conducting mothership-type operations in those waters next year. (Suisancho Nippo, September 24, 1966.)



India

SOVIET UNION AIDS FISHERIES

During a July 1966 visit to Moscow, India's Premier Indira Gandhi signed a technical aid

agreement for developing her nation's high-seas fishing industry. The Soviets reportedly will deliver to India 2 types of vessels suitable for deep-sea fishing. The vessels will fish experimentally for three months to determine which better suits Indian conditions. Once the decision is made, the USSR will supply a "large number" of vessels of the desired type. A shipyard for fishing vessels also will be built in India with Soviet help.

A Soviet technical aid team, organized by the USSR Ministry of Fisheries, visited India in November 1965 to conduct background and feasibility studies. (Fishing News International, September 1966.)



Micronesia

NEW TUNA VESSEL LAUNCHED

A 75-ft. tuna vessel, the "Emeraech" (Morning Star) was launched at a boatyard at Palau early in June 1966. The launching signals the beginning of a new period of commercial fishing in Micronesia. She is the first Hawaiian-style tuna vessel built in the area.

The boat has a larger bait and catch capacity than traditional Okinawan-style boats and requires half the crew. The U. S. High Commissioner of the Trust Territories said at the launching ceremony that the new vessel would have "deep significance" for the economic future of Micronesia. (Pacific Islands Monthly, July 1966.)



Solomon Islands

NEW COMPANY TO EXPLOIT SPINY LOBSTER

A United States firm in Philadelphia, Pa., plans to form a new company to develop a spiny lobster industry in the Solomon Islands. If the venture is a success, many Solomon Islanders could find employment in the new industry. The firm's secretary believes that the spiny lobster could become the Islands' second most valuable export product, after copra.

The local variety of spiny lobster is reputed to be delicious. (Pacific Islands Monthly, July 1966.)



AFRICA

South Africa

REDUCES NEW TRANSSHIPPING LEVY

The decision to increase levy for transshipping fish in ports by foreign vessels from 28 cents a ton to US\$19.60 had been announced August 7 to become effective September 1. Spanish and Japanese companies operating large fleets off South African and South-West African coast quickly left for Angolan and Mozambique coast. In the meantime, Spain protested strongly. South Africa was asked to postpone raise so that affected nations could negotiate matter. On September 16, South Africa Railway Headquarters suspending charge from that date and said "adjustments" would be made to shippers who had paid it. According to "Cape Argus," September 20, new wharfage charges on transfer of fish is 52 cents a ton if made direct from ship to ship; 52 cents, plus \$1.68 for packages under two tons, when landed on quay or jetty and then loaded aboard on-going ship; and 52 cents, plus \$3.44 a ton, if transferred to cold store and later to outgoing ship. These charges will remain in effect until permanent tariffs are announced; meanwhile, foreign ships are returning to Cape Town.

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FACTORYSHIP SUCCESS INSPIRES NEW VENTURE

On September 16, two leading Cape in-shore fishing companies announced decisions to buy a large factoryship to process fish outside the 12-mile fishing limit. The Minister of Economic Affairs was said to have allotted already the necessary licenses. Both decisions to enter this field apparently had been influenced by the initial success of the privately owned "Willem Barendsz." That vessel had processed fish meal worth US\$1.2 million on its first voyage, exceeding its owners' most optimistic hopes.

On September 19, the two groups announced they would unite to operate factoryships and form a holding company and two subsidiary operating companies for the purpose. One of the subsidiaries will be a public company with share capital of about \$5.6 million and operate two factoryships. Another company with about \$2.5 million, the price of about 18

fully equipped 72-foot trawlers, will operate a mutual catching fleet for the two ships. The announcement said: "The resultant economies through this rationalisation in respect of planning, administration, operation, and conservation of capital resources should be considerable."

Negotiations were completed to buy factoryships in Norway for conversion in Cape Town: one vessel--the 19,000-ton "Kosmos V"--was bought for about \$2.1 million from the whaling company liquidating its Antarctic fleet.

The new owners hope that because the Kosmos V was built originally as a factoryship, it can be made operable by the beginning of 1967, and a second ship soon after. Lessons learned from converting the Willem Barendsz should considerably decrease the costs of new ventures.

Two problems remain: the slowness in removing fish meal from factoryships for further shipment, and the limited Cape Town harbor facilities. The danger of spontaneous combustion prohibits haphazard transferral of fish meal. At the same time, the longer a factoryship remains in port to empty contents the smaller the profit. The Willem Barendsz took nearly a month. The facilities at Table Bay will remain about the same for the near future--and so will overcrowding.

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PROPOSES INTERNATIONAL CONFERENCE

On September 16, the Minister of Economic Affairs said in the House of Assembly that the government was preparing to call an international conference with countries that fished off the coast. The purpose would be to formulate a policy acceptable to all parties--and also protect the local industry. Many countries had already indicated a willingness to participate. In the meantime, the minister said, a commission of inquiry would soon be appointed to investigate the local trade. He said there would be little point in attempting to extend the 12-mile fishing limit. (U. S. Embassy, Pretoria, Sept. 27, 1966.)

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South Africa (Contd.):

MIDYEAR FISHING TRENDS

Fish Meal and Fish Oil: Adverse weather during July limited the Cape catch. As a result, it compared unfavorably with the local catches in May and June. On the other hand, the Walvis Bay factories of South-West Africa again reported a heavy intake of fish; output of all products remained at maximum. The bulk of tonnage landed in both areas was converted to fish meal and fish oil. The Cape oil yield was negligible because bulk of fish were low-oil-content anchovy, the yield at Walvis Bay factories passed peak level during July and began to decline toward month's end.

The international fish meal market remained fairly unsettled during July. This was attributed to heavy production in Scandinavian countries and general uncertainty about Peruvian operations starting again on September 1. Because of heavy forward commitments, the industry did not exert any strong selling pressure on the market, and so sale prices remained about the same as before.

The fish oil price level reflected a steady decline when compared with first-half 1966. However, this did not have much effect on the industry because the entire exportable 1966 surplus had already been sold at the beginning of the season at the ruling price level.

Spiny Lobster: The closed season for spiny lobster operations applied through July. The remaining stocks were reduced through shipments to various markets according to spread-out delivery schedule. Although the U. S. market remained somewhat unpredictable during July, it was not necessary to adjust prices to maintain movement. (Barclay's Trade Review, Johannesburg, Sept. 1966.)

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SHOAL FISH CATCH
DROPS IN FIRST-HALF 1966

The Division of Sea Fisheries reported that the Cape west coast shoal fish catch, January-June 1966, was 314,317 tons: 115,166 short tons pilchards, 21,955 tons maasbanker, 61,274 tons mackerel, 110,959 tons anchovy, and 4,963 tons red-eye herring. In first-half 1965, total catch was 381,855 tons: 222,291 short tons pilchards, 42,096 tons maasbanker, 43,967 tons mackerel, 73,501 tons anchovy, and 100 tons red-eye herring. In 1964 the catch was 351,614 tons: 257,178

tons pilchards, 19,952 tons maasbanker, 55,319 tons mackerel, 16,947 tons anchovy, and 2,218 tons red-eye herring.

The June 1966 catch totaled 79,836 tons: 6,401 tons pilchards, 8,498 tons maasbanker, 41 tons mackerel, 64,836 tons anchovy, and 60 tons of red-eye herring. In June 1965, catch was 15,571 tons pilchards, 11,521 tons maasbanker, 40,889 tons anchovy; in June 1964, 33,538 tons pilchards, 549 tons maasbanker, and 6,345 tons of anchovy in June 1964.

The June 1966 catch yielded 18,241 short tons fish meal, 327,564 gallons of fish body oil, and 126,936 lbs. of canned maasbanker.

In South-West Africa, total fish catch by the end of June had reached 510,807 tons and fish meal production was 121,981 tons. The June catch was 141,565 tons pilchards and 392 tons anchovy. (South African Shipping News and Fishing Industry Review, Aug. 1966.)



South-West Africa

PILCHARD FACTORIES REACHING QUOTAS

Three of the 7 pilchard factories at Walvis Bay completed their quotas of 90,000 tons each, and a fourth was expected to complete operations. The remaining factories were expected to reach their quotas by the end of September. The new season is expected to open early in February 1967, although one or two factories will not begin until March or April.

Output of fish and fish products at Walvis Bay and Luderitz during May and June 1966:

| Product | 1966 | |
|----------------------------------|------------|------------|
| | May | June |
| Canned fish (lbs.) | 28,301,627 | 29,369,609 |
| Fish meal (short tons) | 30,178 | 34,161 |
| Fish oil (long tons) | 7,159 | 8,567 |

During July 1966, the following quantities of canned spiny lobster and fish and lobster meal were produced at, and exported through, Luderitz:

| Product | Qty. | Value |
|---------------------------------|-----------|---------|
| | Lbs. | US\$ |
| Fish and lobster meal | 4,833,900 | 205,940 |
| Canned spiny lobster | 15,000 | 17,220 |
| Total | 4,848,900 | 223,160 |

(Barclay's Trade Review, Johannesburg, Sept. 1966.)

