

INTERNATIONAL

U.S. and USSR Agree on Fishing Pact

On February 6, 1967, in Washington, representatives of the United States and the Soviet Union reached agreement on the king crab fishery in the eastern Bering Sea and on several matters affecting their fisheries off the U. S. Pacific Coast.

They reviewed some fishery problems off the U. S. Atlantic Coast and decided to consider them further in late May--just before the annual meeting of the International Commission for the Northwest Atlantic Fisheries.

The U. S. and USSR extended for another 2 years their agreement on king crab fishing on the U. S. Continental Shelf in the eastern Bering Sea. The Soviet quota was reduced from 118,600 cases of canned crab to 100,000 cases.

Soviet Vessels Restricted in Some Ways

A separate 1-year agreement specifies several areas seaward of 12 miles from the Oregon-Washington coast in which Soviet vessels would either refrain from fishing or from concentrating their efforts. In other areas off the Oregon-Washington coast, the 2 nations would take measures, jointly and separately, to protect stocks of fish. Additional protection would be provided for the fishing gear of U. S. halibut fishermen near Kodiak Island, Alaska, in the halibut season. Soviet vessels would transfer cargoes in several designated areas off Washington and Oregon, and off Alaska in the nine-mile zone touching the U. S. territorial sea. Soviet vessels also would continue to fish within the 9-mile zone for the agreement's duration in 2 areas of the central and western Aleutians, and in a smaller area of the northern Gulf of Alaska.

The agreement also provides for cooperation in scientific research, exchange of scientific data and personnel, exchanges of fishermen or their representatives aboard vessels of the two countries, and procedures for reducing conflicts between vessels and gear.

The U. S. delegation at the talks leading to the agreement was headed by Ambassador Donald L. McKernan, Special Assistant for Fisheries and Wildlife to the Secretary of State. The 6-man Soviet delegation was headed by Deputy Minister of Fisheries Mikhail N. Sukhoruchenko. Ambassador McKernan was assisted by advisors from Federal and state fishery agencies, and from sport and commercial fisheries of Alaska, Washington, Oregon, California, Rhode Island, New York, and New Jersey. (Department of State, Wash., D. C., Feb. 6, 1967.)



International Pacific Halibut Commission

PROPOSES 1967 HALIBUT REGULATIONS

The International Pacific Halibut Commission (IPHC) ended its 43rd annual meeting in Seattle, Wash., February 3, 1967. A Convention between the U. S. and Canada authorizes IPHC to investigate and regulate the halibut fishery of the Northern Pacific Ocean and Bering Sea.

IPHC expressed concern to the 2 governments about the effect of increased trawling for other species on the large population of small halibut in southeastern Bering Sea. This area has been set aside as a nursery. All fishing for halibut there has been prohibited in the proposed regulations for 1967.

Scientific findings and conferences with industry impelled the Commission to recommend to the 2 governments these regulations for the 1967 fishing season:

(1) The regulatory areas shall be: Area 2--All convention waters south of Cape Spencer, Alaska. (Area 1 has been combined with 2.) 3A--between Cape Spencer and Shumagin Islands. 3B--Shumagin Islands to Atka Island, excluding Bering Sea. 3C--west of Atka Island, excluding Bering Sea. 4A--the Bering Sea edge--Unimak Pass to Pribilof Islands. 4B--Fox Islands grounds, Bering Sea. 4C--

edge grounds and Bering Sea side of Aleutian Chain between 170° W. and 175° W. 4D-- Bering Sea east of 175° W. and north of a line between Cape Newenham and St. Paul Island and waters west of 175° W. (The flats in southeastern Bering Sea east of Area 4A and south of a line between Pribilof Islands and Cape Newenham have been declared a nursery and closed to halibut fishing.)

(2) Opening and closing hours of regulatory areas shall be 6 p.m., Pacific Standard Time, of date indicated. Exceptions: Area 3C, 4A, 4B, 4C, and 4D where they shall be open at 3 p.m. and close at 6 p.m., local time.

(3) Area 2 shall open May 9 and close when catch limit of 23 million pounds is reached--or on October 15, whichever is earlier.

(4) Area 3A shall open May 9 and close when catch limit of 33 million pounds is reached--or on October 15, whichever is earlier.

(5) Area 3B shall open May 9 and close when catch limit of 3.5 million pounds is reached--or on November 15, whichever is earlier.

(6) Area 3C, west of Atka Island excluding Bering Sea, shall open March 29 and close November 15.

(7) Area 4A--the Bering Sea edge, Unimak Pass to Pribilof Islands--shall open April 3 and close April 17.

(8) Area 4B--Fox Islands grounds, Bering Sea--shall open September 1 and close September 10.

(9) Area 4C--edge grounds between Pribilof Islands and 175° W.--shall open March 29 and close April 22.

(10) Area 4D--east of 175° W. and north of a line between St. Paul Island and Cape Newenham and waters of Bering Sea west of 175° W.--shall open March 29 and close November 15.

The Commission will provide 10 days' notice of closure of Area 2; 18 days' notice of closure of Area 3A; and at least 18 days' notice for Area 3B in 1967.

The next annual meeting will be held in Seattle, Wash., beginning January 23, 1968.

Martin K. Eriksen of Prince Rupert, British Columbia, was elected Chairman, and Harold E. Crowther, Acting Director, BCF, Vice Chairman, for the ensuing year.



International Northwest Pacific Fisheries Commission

JAPAN-SOVIET TALKS START MARCH 1

The 11th annual meeting of the Japan-Soviet Northwest Pacific Fisheries Commission meets in Tokyo March 1 to decide 1967 catch quotas for salmon and crab in northwest Pacific waters covered by the 1956 Japan-Soviet North Pacific Fishery Convention. Measures for fishing operations also will be discussed.

The negotiations are held alternately in Tokyo and Moscow.

Since a bumper year for pink salmon is expected, the Japanese plan to secure a catch quota of 115,000 metric tons--the same as 1965, the previous bumper year.

Japan's 1966 quota was 96,000 tons, a lean year for salmon.

Soviet Firmness Expected

The Soviets are expected to be firm and make new demands. The 1956 treaty expired at the end of 1966 and talks to revise it will be held concurrently with regular fishery negotiations.

Observers expect hard negotiations to decide the 2-year catch quotas for king crabs.

The Soviet Union, signatory to the Continental Shelf Treaty, may have to restrict its crab fishing operations in the Bristol Bay area. Therefore, observers believe she will demand a higher catch in waters covered by the Japan-Soviet Fishery Convention. The Soviet quota last season was 420,000 cases, and Japan's 240,000 cases. (Each case contains 48 half-pound cans.)

South Korea May Enter Waters

Observers believe South Korea's planned advance into waters covered by the Japan-

Soviet Treaty will be another problem discussed.

Government sources expect the Soviets to demand that part of Japan's catch quota be allocated to South Korea if she is allowed to fish in the restricted waters because the USSR does not recognize the Republic of Korea. However, the Japanese are expected to state that they do not plan to help South Korea advance into the fishery grounds.

The area covered by the fishery treaty embraces a wide expanse of water west of 175° W. longitude. The restricted waters were expanded in 1962--and the fishing zones divided into zone "A" and zone "B."

Fishing fleets headed by motherships are allowed to operate in zone "A," covering the area north of 45° north latitude; small fishing vessels operate in zone "B" waters south of 45° north latitude. ("The Japan Times," Jan. 5, 1967.)



Norway May Keep Some Fishing Rights in Greenland

Norway may retain some fishing rights in East Greenland, although they will probably be of little value because the area has few fishery resources. Norway gained limited hunting and fishing rights in East Greenland under a 1924 agreement with Denmark, which controls the island. The agreement expires June 1967. Denmark is reported to have negotiated a compromise continuing Norway's limited fishing rights. (U. S. Embassy, Copenhagen.)



Marine Oils

DECLINE IN 1967 WORLD PRODUCTION FORECAST

A U. S. Department of Agriculture publication forecasts a slight decline in world production of marine oils in 1967 because of

Estimated World Production of Marine Oils, Average 1955-59, Annual 1960-66 and Forecast 1967									
Commodity	Forecast 1967	1/1966	1965	1964	1963	1962	1961	1960	Average 1955-59
..... (1,000 Short Tons)									
Marine oils:									
Whale	155	175	218	249	295	390	428	418	427
Sperm whale	175	170	170	165	149	130	120	122	119
Fish (including liver)	940	935	875	836	684	734	662	512	427
Total	1,270	1,280	1,263	1,250	1,128	1,254	1,210	1,052	973
1/Preliminary. Source: "World Agricultural Production and Trade (Statistical Report), January 1967," Foreign Agricultural Service, U.S. Department of Agriculture, Washington, D. C.									

Law of the Sea

BRAZIL MAY RATIFY 1958 CONVENTIONS

The four 1958 Geneva Law of Sea Conventions (on the High Seas, Continental Shelf, Fisheries, and Territorial Sea) are scheduled to be presented to the Brazilian Congress for consideration when the Costa e Silva administration takes over in March. Ratification probably will follow within 3 or 4 months with Brazil entering certain reservations--like those made by other ratifying countries. (U. S. Embassy, Rio de Janeiro, Jan. 19, 1967.)



a further cutback in the Antarctic baleen whale oil quota. The chief factor will be a drop in Japanese production. Sperm oil production likely will be fractionally larger. Increased output by the Soviet Union and the Republic of South Africa is expected to be offset largely by further declines for Japan, Norway, and Peru.

Fish oil production, which set a record in 1966, probably will continue its upward trend in 1967. With record supplies available in 1966, fish oil prices were down sharply.



Norway and USSR Continue Joint Fishery Research Projects

Norwegian newspapers report that joint Norwegian-Soviet research projects will continue in 1967. They were scheduled to begin with a study of capelin resources in the Barents Sea in January-March 1967 by the Norwegian vessel "G. O. Sars" working closely with the Soviet Polar Institute for Marine Fisheries and Oceanography (PINRO).

Norway increased its capelin catch appreciably in 1966. Soviet interest in capelin probably is related to reported Soviet plans to build a fish meal and oil factory near Murmansk--that area's first.

Norwegian concern about possible over-fishing in the Northeast Atlantic may be stimulating their research efforts. A newspaper reports that the 1966 Norwegian-Soviet-British research project in the Northeast Atlantic will be continued in 1967. This work includes efforts to assess stocks of cod, herring, and ocean perch in the Norwegian Sea and other areas. The Norwegian research vessels G. O. Sars and "Johan Hjort" will take part in this project in August-September 1967.

Sealing Commission Met in Moscow

The Norwegian-Soviet Sealing Commission met in Moscow, December 15-17, 1966, and heard reports on their sealing catches and scientific investigations of stock in the Northeast Atlantic. The Commission agreed to increase cooperation to attain a rational exploitation of seal resources. The next meeting will be held in Oslo in November-December 1967.

One joint research project involves a study of the Greenland seal by a Norwegian sealing vessel manned by Norwegian and Soviet scientists. (U. S. Embassy, Oslo, Dec. 24, 1966, and Jan. 15, 1967; U. S. Embassy, Copenhagen, Jan. 10, 1967, and other sources.)



Joint Expedition Planned by Brazil and Norway

A joint Norwegian-Brazilian ocean research expedition is planned for the second half of 1967, according to the Norwegian periodical "Bergens Tidende." The expedition vessel "Professor W. Besnard" is being built at a Bergen shipyard for the Oceanographic Institute in Sao Paulo, Brazil. The vessel, Brazil's first for modern ocean research, will be fitted with Norwegian research equipment. NORAID, the Norwegian governmental foreign aid agency, has appropriated 150,000 kroner (US\$21,000) for special equipment for the expedition.

The expedition also will serve as a training program for Brazilian scientists and crew members. The Norwegian participants will include 6 ocean research scientists and 3 senior members of the crew, including the skipper. (U. S. Embassy, Oslo, Dec. 24, 1966.)



USSR Plans 1968 International Fisheries Fair

The Soviet Union's Ministry of Fisheries plans to organize an international fisheries fair in Leningrad for summer 1968. The fair (Inrybprom 68) will exhibit Soviet fishing equipment, processing equipment, fishing techniques, research developments, etc. The Soviets expect many foreign firms to participate. Special attention will be paid to the development of the Soviet fishing fleets with exhibitions of many types of vessels and shipboard advances in mechanization. The Soviets also hope to make many contacts with foreign businessmen to exchange information on fishery developments and to promote their fishery exports. (Tass, Nov. 30, 1966.)



FOREIGN

CANADA

"CANADIAN FISHERMAN" SEES COLLECTIVE RESPONSIBILITY FOR HIGH BOAT LOSSES

An editorial in the January 1967 "Canadian Fisherman" asks: "Why does the Canadian fishing industry lose so many boats through fire, collision, grounding, and bad weather?" Its title ". . .the wrecks are all thy deeds" is from Byron's poem "about the ocean's harsh tyranny over man," but the editors place on the sea only part of the blame for the death of ships. Yes, the editorial says, Canadian fishermen face extremely rigorous weather and icing conditions and operate in high density traffic. But the forebears of today's fishermen lived with these dangers and were certainly less well equipped for them.

The responsibility, says the editorial is not with the sea but with people. "We fail, year after year, to do anything effective about correcting the root evils of our entire safety environment--the lack of certificates of competency, the lack of load-lines beyond which a fishing vessel may not load, the lack of adequate stability criteria for vessel designers, the lack of adequate fire-fighting equipment. . . . Perhaps we have developed a subconscious and compulsive mental resistance to putting into practice reforms which we know will help to avert tragedy but which may also affect our profit and loss position? Is there any other way to explain how, in 1967, we still lack in the fishing industry such accepted standards of safety as load-line regulations and certificates of competency for skippers?"

Certificates of Competency Are Needed

The editors are fully aware that the requirement of a certificate of competency would idle many fishing skippers. To prevent the abrupt ouster of these older skippers, a gradual phasing-out process, say 10 years, could be adopted. It would give older men a chance to make other plans.

The editorial states: "The introduction of certificates of competency would go along way towards eliminating the causes of most of our losses. First, they would create an

atmosphere of professionalism, an awareness of certain standards, a confidence backed by knowledge rather than guesswork. Second, what is given can be taken away again--the skipper with a certificate of competency will need it for his livelihood; he is unlikely to risk having his certificate suspended or cancelled for overloading, for trying to ride out a storm when he could take shelter, for running a sloppy ship which is a floating accident or fire hazard."

The editors see no excuse for the absence of load-line marks on the hulls of fishing boats. "When a seiner comes round the breakwater, belly deep in the water and decks awash, aren't we delighted? The more fish we bring in, the more money everybody makes--this is the way our 'lay' system works. Isn't it every skipper's fondest ambition to bring in the biggest load of fish. . . to be recognized as the 'highliner' of the fleet? Isn't this 'highliner' caste symbol, in practice, our measure of a skipper's competency?"

And the causes of fire? The editorial says "the vast majority of fires aboard fishing boats occur through slovenly 'shipkeeping.' Equally true, they fail to be extinguished because the fire-fighting equipment is inadequate, or in poor working condition, or inaccessible for one reason or another. We doubt if there is a fire-detection system aboard a single commercial fishing boat in Canada."

Note: The February 1967 issue of "Canadian Fisherman" reports Canadian Government plans to require certificates of competency for masters and mates of fishing vessels over 100 gross tons after January 1, 1968. Applicants will have to pass examinations to qualify for them. However, a special provision will allow current masters and mates to get certificates without examination if they apply before January 1968 and have worked on a vessel of at least 25 gross tons.

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SETS LIMIT ON LOBSTER TRAPS

Requests from a large majority of Canadian lobster fishermen on the north shore of Prince Edward Island have led to a lobster trap limit of 500 per boat for 1967 in a portion of Canadian District 7B. This covers the area between East Point and North Cape on Prince Edward Island. It will be effective for the season from May 1 to June 30, 1967.

Canada (Contd.):

The high limit was set because of the short notice given. It probably is the first step toward a lower trap limit in the future. A limit was set in Canadian District 8 in 1966 as an experimental measure to protect lobster stocks and ensure better economic returns to fishermen.

To Survey Lobster Areas

Canada plans to survey this year lobster fishing areas throughout the Maritime Provinces--to see whether greater trap limitations and other controls may be necessary in 1968.

As another interim measure affecting the shore of Prince Edward Island, lobster fishing licenses for part of District 7B will be issued this year only to those who held such licenses in 1966, except for extenuating circumstances.

Also, it is planned this year to register all fishing boats in the Maritime Provinces. The Fisheries Minister feels that further measures may be necessary to protect this valuable industry from overfishing. (Canadian Department of Fisheries, Jan. 31, 1967.)

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EAST COAST HERRING MEAL
INDUSTRY EXPANDS

Three new herring fish meal plants have been set up on Canada's East Coast during the last 18 months. A fourth is scheduled to be built in Stephenville, Newfoundland.

Plans for a fifth plant were announced Jan. 25, 1967, by the Canadian Fisheries Minister. The new plant will be on Campobello Island in New Brunswick. Scheduled for completion in June 1967, the plant will have a daily capacity of 350 tons of herring yielding 70 tons of fish meal and 35 tons of fish oil. Processing capacity could be expanded later. The plant is being built by Canadian Seafood Ltd., reportedly a partnership of a German and a local company.

In British Columbia, some herring seiner operators are reported planning to transfer their vessels to the East Coast when the West Coast fishery closes in March. (U. S. Embassy, Ottawa, Feb. 1, 1967, and other sources.)



SOME FISH "TASTE" WITH THEIR FINS

If man could taste with his fingertips and toes, he would have an ability which is not uncommon among certain fish. A study of two fish species which locate food with sense organs in modified fins was described in a joint paper by a scientist with the University of Michigan and his associate with the University of California.

Modified pelvic fins of the squirrel hake are transformed into tendrils which trail below and in advance of the fish, it was explained. The modified fins are studded with taste buds. Laboratory work indicated that those sensory organs are sensitive to food decomposition products in the water.

Another species, the searobins, exhibits modified pectoral fins which are essentially digging organs. Oscilloscope records from nerves of the fins showed them to be sensitive to mechanical, chemical and thermal stimuli.

Fish having the adapted fins appear to depend on them. When the fins were missing on either side, the fish had difficulty locating food in that direction.

Modified fins of fish may be useful in other ways. During mating periods, some fish appear to identify mates by their fins. (The University of Michigan News Service, Ann Arbor.)

LATIN AMERICA

Argentina

ADOPTS 200-MILE MARITIME JURISDICTION

On January 4, 1967, Argentina extended its maritime jurisdiction over adjacent waters 200 nautical miles from low tide. In the Gulfs of San Matias, San Jorge, and Nuevo, the distance will be calculated from base lines drawn from headland to headland. Also, sovereignty is extended to the adjacent "sea bed and sub-soil of submarine zones" up to the 200-meter isobar--or beyond that depth where exploitation of natural resources is feasible. Freedom of air and sea navigation is not affected.

Within 90 days, the Argentine Government is scheduled to issue permanent regulations on foreign exploitation and exploration of the sea resources within the 200-mile zone. Until then, these temporary measures apply to foreign fishing and conservation: the Chief of Naval Operations (CNO) will issue permits (to expire March 29) to foreign flag vessels for fishing beyond the 12-mile zone; Naval Operations will verify that foreign vessels comply with requirements of the Convention of Safety of Human Life on the High Seas and charge an inspection fee of 10,000 pesos (US\$12.82); foreign vessels authorized to fish must communicate positions daily; and foreign vessels currently fishing have 15 days to comply with the temporary measures.

Brazil Disturbed by Action

Foreign vessels now fishing within the newly claimed Argentine waters are believed to be Brazilian, Uruguayan, Soviet, and perhaps Japanese.

Brazil believes the Argentine 200-mile jurisdiction will seriously impair Brazilian fishing for hake off the Argentine coast. A Brazilian Navy official also expressed deep concern and termed the action an acute threat to Brazilian interests. On the other hand, public reaction in Peru favored the Argentine declaration as helping the 200-mile claim "to be incorporated into Latin American international law." (U.S. Embassies in Buenos Aires, Jan. 4, 1967; Rio de Janeiro, Jan. 6, 1967; and Lima, Jan. 7, 1967.)

Foreign Vessels Need Authorization To Fish

Starting January 29, 1967, foreign vessels fishing in the Argentine 200-mile Maritime Zone will be required by Argentina to obtain authorization. (U. S. Embassy, Buenos Aires, Jan. 18, 1967.)

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SOVIETS PROTEST ARGENTINA'S 200-MILE MARITIME JURISDICTION

On February 2, 1967, the Soviet Embassy in Buenos Aires issued a statement disputing Argentina's right to extend unilaterally its maritime jurisdiction to 200 miles. The Soviet statement accuses Argentina of violating the rights of other states to fish on the high seas guaranteed by the 1958 Geneva Convention on the High Seas. (Argentina, however, has not ratified the Convention.) The USSR rejects the notion that any nation has the right to extend its sovereignty beyond 12 miles, or otherwise interfere with freedom of the high seas.

The Soviet Embassy's statement added that the payment of fishing fees to Argentina was done only for "commercial reasons upon instructions of boat owners." The statement expressed Soviet expectation that Argentina will reconsider its position. (U. S. Embassy, Buenos Aires, Feb. 3, 1967.)

Comment: It is known that Soviet fisheries operations on the high seas are supervised by the Ministry of Fisheries and that Soviet vessels engaged in distant-water operations are not privately owned.

One Soviet Captain Reportedly Accepted Change

Earlier, it was reported that the captain of a Soviet factoryship deposited 400,000 pesos (US\$2,000) to cover inspection fees for 40 Soviet fishing vessels operating in Argentine-claimed waters.

The captain and the Argentine Navy agreed that Soviet vessels would concentrate 40 miles off the coast of Necochea and off Valdes Peninsula, Chubut Province, where the Argentine Navy will board, inspect, and deliver individual licenses.

Argentina (Contd.):

The Argentine Navy announced the beginning of enforcement patrols on January 29. Any unlicensed foreign fishing vessel found inside the 200-mile maritime jurisdiction will be given 8 hours to begin to leave the 200-mile area--or pay a 10,000 peso (US\$50) license fee. If the vessel refuses either, the Navy will escort it to the nearest Argentine port.

The Foreign Office told the press on January 27 that Brazil has formally raised questions regarding the new law and its application. Argentine officials met January 26 to study Brazil's proposal for negotiations and to consider implementation of the new fishing regulations. (U. S. Embassy, Buenos Aires, Jan. 27, 1967.)



Cuba

WILL NOT RECOGNIZE ARGENTINA'S 200-MILE WATERS

On Jan. 28, 1967, the Cuban Ministry of Foreign Affairs condemned the "arbitrary" and "irrational" decision of the "Argentine Military Government" to extend unilaterally its territorial waters to 200 miles. It called the act "a flagrant violation of the 1958 Geneva Convention" adopted by a majority of nations, among them Argentina.

Cuba pointed out to Argentina that if the U. S. extended its territorial waters to 200 miles--that would encompass all of Cuba, only 90 miles from the U. S. coast. The Cuban Government, therefore, will not recognize the Argentine extension--either "de facto" or "de jure." The statement called for the "payment of any tribute" to Argentina for the right to fish within its claimed waters "immoral, clumsy, and cowardly."

Cuban tuna vessels have been reported fishing along the Brazilian and Argentine coasts in recent months, sometimes with Soviet vessels.



Mexico

EXTENDS FISHERIES JURISDICTION TO 12 MILES

The law extending Mexican fisheries jurisdiction from 9 to 12 miles was promulgated in "Diario Oficial" on January 20, 1967. The law permits foreign nationals now fishing in the 9- to 12-mile zone to continue without restriction for one year starting January 1, 1967. During 1967, Mexico will negotiate with these countries conditions permitting their nationals to continue fishing for a maximum additional 5-year period--through 1972. Starting in 1973, however, no foreign country will be permitted any fishing rights within the 12-mile limit, nor will the historic fishing rights of nationals of any country be recognized. (U. S. Embassy, Mexico, Oct. 21, 1966, and Jan. 23, 1967.)

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FIRM MAKES SHIPBOARD FISH MEAL PLANTS

A Mexican firm reportedly has manufactured some shipboard fish meal plants to be installed aboard shrimp vessels for processing incidental catches of trash fish into fish meal. Several plants already have been distributed and installed aboard shrimp vessels operating out of Mazatlan, Mexico. The fish meal is produced at a relatively low cost because the same crew operates the fish meal plant. The quality is satisfactory. The fish meal competes successfully on the world market with other meal produced by shore plants. The shipboard plant is capable of producing 1.5 tons of fish meal daily. It is patented in several countries, including the U. S. Write to: Mr. Ing Hector Vargas, Productos Marinhos Industrializados, S. A., Mexico 6, D. F. Mexico.



Chile

FISH MEAL AND OIL PRODUCTION IS UP

Chile's anchovy catch for October 1966 (principally in Arica and Iquique areas) was 14,474 metric tons; it was 4,653 tons in October 1965 and 57,838 tons in October 1964.

Chile (Contd.):

From January-October 1966, the catch was 1,016,743 tons, compared to 310,059 tons in 1965 and 792,700 tons in 1964 for the same period.

Month	1966	1965	1964
 (Metric Tons)		
January	33,504	12,836	24,131
February	27,113	11,371	23,576
March	13,536	10,278	4,768
April	14,068	3,587	16,373
May	26,708	4,090	16,232
June	18,783	2,989	17,271
July	17,872	2,188	6,978
August	17,920	3,651	5,783
September	11,625	794	11,250
October	2,757	888	11,007
Total (10 months) . . .	183,886	52,672	137,369

Chilean production of fish oil from anchovy during October 1966 was 323 metric tons, compared to 61 tons in October 1965 and 904 tons in October 1964. Fish oil production for January-October was 17,829 tons in 1966, 6,035 tons in 1965, and 14,844 tons in 1964.

The price paid to the independent vessels for anchovy fluctuated between 50 and 55 escudos (US\$11.10 and 12.20) a metric ton.

Also, from Antofagasta to Talcahuano, the use of other species (principally sardine, hake, and anchovy) for fish meal yielded 2,872 tons in October 1966 compared to 1,361 tons in October 1965. Meal production for January-October 1966 was 24,786 tons; it was 17,692 tons in the 1965 period.

Exports of fish meal for January-July 1966 were 115,492 metric tons worth US\$16,182,356 f.o.b. Chile. Exports went mainly to the U. S., Netherlands, and West Germany. Exports of fish oil through July 1966 were 10,792 tons worth US\$1,825,652 f.o.b., destined for The Netherlands, West Germany, and France. (Institute of Fishery Promotion, Santiago, Nov. 23, 1966.)



Ecuador

FISHING INDUSTRY GROWS

Ecuador's fishing industry continues to grow. Exports of canned and frozen tuna, shrimp, and spiny lobster are increasing appreciably. The increase in tuna exports

occurred despite a bait shortage that prevented attainment of the full potential catch.

In July 1966, the Government authorized duty-free entry for equipment and materials required by local fishermen. In October, it reorganized the Fisheries Institute to increase its scientific and technical assistance to the industry. Also, Ecuador has agreed to the conservation measures on yellowfin tuna recommended by the Inter-American Tropical Tuna Commission.

The new Merchant Marine Academy founded at Guayaquil in mid-July 1966 includes fishing operations in its curriculum. The Government is considering enactment of a National Fishing Law.

These promising Government moves have encouraged private enterprise to enter the fishing and fish packing field on a large scale.

Subsidiaries of Foreign Firms Active

Among established firms, a subsidiary of a California tuna packer is expanding in Manta; a subsidiary of another California firm recently established a tuna-freezing operation in Manta. Among new firms, one in Guayaquil is canning "Pinchagua" sardines, and another is packing shrimp; at Salinas, a firm has been organized to produce industrial fishery products, and another announced plans to produce annually 2,240 tons of "fish flour" and 112 tons of oil. A Chilean fishing firm has studied plans for tuna packing at Santa Rosa using Chilean tins for cans; at Manta, another Chilean-owned firm readied its two 500-ton refrigerated tuna vessels for fishing. A fishery affiliate of a large construction firm organized a Galapagos-based freezing and canning operation. Also, at the northern port of Esmeraldas, a fishery firm made its initial 3-ton shipment of frozen shrimp to the United States, with similar semi-monthly shipments scheduled for the future. Another large firm planning to build a modern long-range fishing fleet continued negotiations with a financing group. (U. S. Embassy, Quito, Jan. 14, 1967.)

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ISSUES TEMPORARY FISHING LICENSE

Ecuadorean authorities are issuing to U.S. vessels a temporary document valid in place of register and fishing license. The docu-

Ecuador (Contd.):

ment can be shown if a vessel is stopped by Ecuadorean patrol craft. Three U. S. vessels claim that register and license have been secured quickly, with good cooperation from the fishing inspector and port captain's office in Guayaquil. One U. S. vessel arrived early one Sunday morning and sailed with a validated temporary document at noon the same day. (U. S. Consulate General, Guayaquil, Jan. 30, 1967.)



Venezuela

WHOLE SARDINES MAY NOT BE USED FOR FISH MEAL

The Venezuelan Government has reaffirmed that whole sardines may not be used for fish meal--a conservationist position. While it is generally accepted that the sardine resources are presently underexploited, it is readily acknowledged that there is insufficient evidence to prove that uncontrolled fishing would not endanger them. The fishery employs 5,000 workers and is an important food for low-income groups.

The reaffirmation resolved a controversy between the sardine canneries of Cumana and the fish reduction plant of Puerto La Cruz--which a Government resolution had triggered.

The resolution was designed to enlist the aid of private fishing vessels in experimental fishing and providing data on fishing effort and catch necessary to better evaluate Venezuela's fishing potential, particularly the sardines. Private vessels can work in restricted areas if fishing data are kept and submitted to Government authorities. Canneries have priority on sardines caught by these vessels up to 80 percent of their installed capacity; however, 20 percent of their catch may be assigned as whole fish to reduction plants after they meet previous obligations to canneries.

Reduction Plant Owner Saw Green Light

The new owner of the reduction plant at Puerto La Cruz interpreted the latter provision as a change in the standing prohibition on using whole sardines for meal. The plant offered Bs100 (US\$22.32) per ton at

plant side compared to Bs40 (US\$8.93) per ton paid by the canneries. Priority rights of the canners and identity of catch were lost with the large margin in price; net fishermen and experimental vessels sold to the reduction plant's pick-up boats.

The dispute broke as the 1966 sardine season was closing. The canneries took advantage of the seasonal layoffs to obtain a high-level decision on the use of whole sardines by reduction plants. The standardized price structure between canneries and fishermen for the 1967 season was jeopardized. Moreover, most canneries have small reduction plants and probably would modernize those facilities during the off-season--if there was a good possibility of using whole sardines for meal. The canneries, citing the U. S. experience on the California coast, noted that limited sardine fishing is still maintained there. They recalled the noticeable depletion of sardine resources in 1955 when Venezuela permitted uncontrolled fishing. The high employment among low-income coastal families lent political weight to the canneries' claim to priority.

The Puerto La Cruz reduction plant owner contended that the sardine resources, with an annual potential placed at 400,000 tons by the La Salle Foundation, could support a reduction industry. He argued that the canneries, now consuming around 40,000 metric tons, must pay a better price to the fisherman to encourage greater effort and support modernization of fishing equipment. He noted that the recent French Mission found the price paid for sardines in Venezuela one of the world's lowest.

Council Formed To Study Industry

Venezuela's regulations continue to restrict the fish reduction industry to three species of whole fish, rabo amarillo (Cetengranlis edentulus), bagre (Arius spixii), and machuelo (Opisthonema oglinum), and canneries offal. The dispute, however, focused attention on the fisheries industry and its potential. President Leoni has named a National Council of Fisheries Development of three commissions: Fisheries Investigations, Fisheries Administration, and Industry Arbitration.

The U. N. Special Fund Project for Fisheries Research and Development, requested by Venezuela, is in the final stage of prepa-

Venezuela (Contd.):

ration. This joint 5-year project should begin in 1967, bringing to Venezuela internationally known fisheries experts. (U. S. Embassy, Caracas, Dec. 13, 1966.)



Brazil

SOVIETS SEEK BRAZILIAN MARKET

In January 1967, the Soviet stern trawler "Livadia" (Tropik-class RTM-7023, 2,600 gross tons) reached Porto Alegre in southern Brazil to deliver 400 metric tons of frozen fish at a low price of US\$145 a ton (about 7 U. S. cents a pound). (U. S. Embassy, Rio de Janeiro, Jan. 6, 1967.)

The Livadia was unable to sell her catch and departed on Jan. 6, 1967. No fish wholesaler in Porto Alegre would buy the "carapina" because it was not familiar to the public. The fishing industry reportedly was shocked by the low price of Soviet fish--60 percent below the going local prices. The Brazilian Bureau of Fisheries at Porto Alegre protested to Rio that the sale would be harmful to the local industry already troubled by "glutted markets."

The Livadia, of the Sevastopol High-Seas Fisheries Administration, arrived on the Patagonian Shelf fishing grounds in October 1966. The catch of 400 tons (880,000 lbs.) in less than 2 months was fair fishing.



Peru

REPORT ON FISH MEAL INDUSTRY

The Peruvian fish meal industry is in economic difficulty partly because of an industry-wide strike, November 1-December 14, 1966, and the continuing lower world price. Although this price strengthened during the strike, it is still much below recent years and even below the break-even point for many plants. There is little optimism that the price will rise much this season.

The prolonged strike reduced Peruvian fish meal stocks, which were substantial

shortly after the fishing season began September 1, 1966. However, the strike put many plants in serious difficulties because they could not meet payrolls or other expenses. Also, the increases won by the strikers place a greater burden on companies already in the red.

Further, the crews of almost 2,000 purse seiners and 150 plants, roughly 40,000 workers, were unproductive during the 3-month closed season that ended September 1, and during the strike. The strikers have gone back to work for 30 days, pending acceptance of their demands.

Peru Requires Export License

This key industry's troubles impelled the Government to require, effective January 1, 1967, fish-meal export licenses, and fish meal to be sold abroad on quota system and allocation of markets by the National Fisheries Association.

In 1966, Peru produced 1,470,478 metric tons of fish meal; in 1965, 1,282,011; in 1964, 1,552,214; in 1963, 1,159,233 tons. Almost all fish meal is exported. Peru uses only about 20,000 tons; this is expected to increase somewhat this year.

Semirefined fish-oil exports, virtually total production because Peru uses little, in June-October 1966 were 56,052 tons.

Prices: Due to, and during the strike, the price rose from about US\$120 a ton for meal f.o.b. Callao to \$130 a ton. On December 21, the price was down to about \$128 a ton for meal; on January 3, 1967, it was the same. Crude fish oil on December 6 was \$154 c.i.f. Europe, and semirefined about \$160 a ton--up about \$14 in 6 weeks. On December 21, semirefined oil was \$175 a ton, crude oil \$160.

Fish meal prices are not expected to rise above \$135 a ton f.o.b. Callao during the next few months--which will not bring many companies a profit.

1967 Closed Season: The closing date of the current fishing season has not been announced. It is expected that the Government will set a season limit between 7.5 million and 8 million metric tons of anchovy. Because the strike was long, the closed season (usually June, July, and August) may be reduced.

Peru (Contd.):

Plants: As of November 15, 1966, there were 150 idle fish meal plants. During 1966, only 2 plants produced over 40,000 tons of meal each; one produced over 30,000 tons; 15 plants over 20,000 tons each; and 103 plants each under 10,000 tons. The industry still has many small producers.

Twenty-three plants were closed for non-strike reasons: they had no fishing fleet, no money to operate, had been foreclosed, or were too deteriorated.

Locations: The 150 plants are in 23 localities along the coast. However, 83 of the plants are in 4 places (Chimbote, Callao, Supe, and Tambo de Mora) and produced 59 percent of the fish meal so far this calendar year.

Destination: Over 50 percent of Peru's fish meal exports goes to 3 countries: West Germany (20.9 percent), the U. S. (19.9 percent), and Holland (10.7 percent).

The Strike: The fishermen's union (Federacion de Pescadores del Peru) struck for the following increases: 35.00 Soles (US\$1.30) per ton of anchovy caught for the crew, plus 6.30 Soles (US\$0.24) per ton for fishermen's benefit fund (Caja de Beneficios del Pescador), plus 1.95 Soles (US\$0.07) for social assistance fund (Fondo de Asistencia y Prevision)--a total increase of 43.25 Soles (US\$1.61) per ton.

On November 25, 1966, the Government granted a 22.00 Soles (US\$0.82) per ton increase--both sides rejected it.

On December 13, 1966, the union lifted the strike for 30 days until the Government could study its demands further. The fishermen won an increase of 22 Soles (US\$0.82) per ton of catch, in food allowances for ship's crew, in wages of ship's engineer--a total of about 31.50 Soles (US\$1.18) a ton for fish caught or US\$7.00 a ton for fish meal produced.

The producers claim they cannot afford any increase. They are seeking Government assistance through tax reductions (there is a direct tax of US\$8.00 plus an indirect tax on exported meal). However, the Government needs all its revenue.

Government Regulations: The Government, on December 9, 1966, undertook to regulate production and marketing of fish meal. A decree designates Marketing Committee of National Fisheries Association to work with Ministry of Agriculture, Industrial Bank, and fisheries associations to adopt a system of agreements on marketing fish meal. This will include setting marketing price and quotas for buyers.

Current Fishing Season: The current fishing season is the finest on record, but the industry still is plagued by a relatively low market price of near US\$130 a metric ton for fish meal f.o.b. Callao (on January 13, 1967), and mounting stocks. Stocks on hand on Dec. 15, 1966, were 279,000 metric tons. By year-end, 59,000 tons were shipped, but roughly 180,000 tons were produced in that same period, bringing stocks near 400,000 tons.

In January 1967, about 80,000 tons are expected to be shipped. But production will exceed 300,000 tons, increasing inventory to about 600,000 tons.

The Institute del Mar will recommend cessation of fishing from February 15 to March 30, 1967, to permit growth of immature fish--and continuation of fishing into June, possibly later, with maximum allowable catch of 8 million metric tons of anchovy for the season. The Institute also may recommend a 5-day week for fishing fleets.

The prospect for companies in heavy debt is bleak. Reliable sources continue to forecast a major industry shakedown. An industry leader said 40 percent of production is foreign owned--and will increase if the Government does not aid the fish meal industry. (U. S. Embassy, Lima, Jan. 7 and 19, 1967.)



EUROPE

USSR

AVERAGE PACIFIC OCEAN PERCH CATCH IS SMALLER

During the last 3 years, the Soviet average daily catches of Pacific ocean perch per large sternfactory trawler (BMRT) decreased 35 percent. In 1964, each BMRT caught an average of 41 metric tons (90,000 lbs.) per day; in 1965, this average catch decreased to 38.4 tons; and in the first 9 months of 1966 to 27 tons.

Soviet Far Eastern fishery officials attributed the lower average daily perch catches to the fact that fishermen have not adapted fishing gear and methods to new conditions--not to biological depletion of stocks.

They accused the Sakhalin and Primorskii Krai Fisheries Administrations of red tape. They claimed that midwater trawl and pair-trawl gear is available, but it is not issued to fishermen in perch, hake, herring, wall-eyed pollock, and other fisheries. They urged immediate introduction of midwater and twin trawling in Soviet Pacific fisheries, especially in the newly developing pelagic fisheries. Most Soviet Pacific ocean perch catches are landed from fisheries off the U.S.-Alaska coast.

* * *

ANTARCTIC WHALING FLEET IS SMALLER

For the 1966/67 antarctic whaling season, only 3 of the usual 4 Soviet whaling factoryships were assigned to hunt and process whales: the "Iuri Dolgorukii" from Kaliningrad; the "Sovietskaia Ukraina" from Odessa; and the "Sovietskaia Rossiia" from Vladivostok. The fourth factoryship, the "Slava," was reassigned this season to North Pacific whaling.

The three Soviet motherships began whaling early in December 1966. A large group of scientists is aboard to study the biology of whales and their concentrations. One result of prior whaling research (now concentrated at Odessa) was the determination of the whale's life span at 30-40 years.

* * *

AMUR RIVER SALMON RAN LATE IN 1966

The 1966 migration of Pacific chum salmon into the Amur River occurred unusually late. In normal years no salmon reach the spawning grounds later than about mid-September. In 1966, however, chum salmon continued to migrate until the end of September. Soviet scientists believe the fish were delayed by storms in the Sea of Okhotsk and the Tartary Straits. Despite the late migration, all fishing for salmon ceased by mid-September to allow more chum to reach the spawning grounds to help build up the decimated stocks.

To protect spawning salmon migrating upstream, the Soviet Far Eastern lumber industry was asked to truck timber rather than float it down river during the salmon spawning season. Many fish hatcheries, and pools where young fish can grow undisturbed, have been built along the Amur River.

* * *

SAKHALIN LOOKS AHEAD 15 YEARS

The Scientific Council of the Sakhalin Institute for Fisheries and Oceanography met in December 1966 to discuss the present condition of fishery resources around Sakhalin and the development of its fisheries during the next 15 years. Two conclusions were reached: (1) Fishery resources around Sakhalin Island are not fully exploited. The catch can be increased several times. (The principal species caught are Alaska pollock, squid, Pacific cod, ling cod, anchovies, shrimp, and seaweed.) (2) Sakhalin catches in the eastern Pacific and Bering Sea also can be increased. Species mentioned were flounder, herring, ocean perch, sablefish, and hake. Sakhalin fishermen made good 1966 hake catches. Their yearly plan provided for only 6,000 metric tons. By December 2, when the fleet left the Pacific northwest fishing grounds, they had caught 24,000 metric tons.

The entire Soviet Pacific hake catch in 1966 was 130,000-140,000 metric tons, all caught off Washington and Oregon.

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JAPANESE TECHNICIANS OBSERVE SOVIET NORTH ATLANTIC OPERATIONS

In October 1966, 4 Japanese observers boarded the 2,500-ton Soviet stern trawler

USSR (Contd.):

"Pushkin" in the Northwest Atlantic area. They spent 40 days aboard Soviet vessel off Southern Labrador and observed fishing and processing of cod and ocean perch into fillets, canned cod liver, cod-liver oil, dressed cod and perch, and meal. Average daily production used only 20 metric tons of fish a day, which the Japanese say would be uneconomical for them. They also reported Soviet gear and equipment less sophisticated than their own. Soviet sources report that the Japanese made "a number of practical recommendations in handling trawls and in automating trawl winches."

The visit was part of the Fishery Science and Technology Exchange Agreement concluded between Japan and the USSR in mid-1966. ("Suisan Keizai Shimbun," Dec. 26, 1966, and other sources.)

* * *

TEAM OBSERVES JAPANESE TUNA FISHING

A Soviet tuna fishery team arrived in Japan December 23, 1966, under the Japan-USSR fishery technical cooperation program and was scheduled to board Japanese tuna vessels to observe fishing operations in the South Pacific. The team consisted of one fishery expert from the Soviet Fisheries Ministry, a navigator assigned to a Soviet tuna factoryship, and an interpreter. The members boarded the Japanese tuna vessel "Kuroshio Maru No. 11" (180 gross tons) scheduled to depart Tokyo on December 28 for the South Pacific Ocean (near 178° W. longitude and 8° S. latitude).

On January 18, 1967, the Soviets transferred at sea to the "Banshu Maru No. 5" (3,677 gross tons) to observe fishing operations until February 26, 1967, then return home aboard a Soviet vessel. ("Suisan Keizai Shimbun," Dec. 26, 1966.)

Note: Later reports said Soviets returned to the USSR because accommodations aboard the vessels were unsatisfactory.

* * *

CANADIANS AND OTHERS STUDY TRAINING OF RECRUITS

In December 1966, eight Canadian Federal and Provincial officials were in the Soviet Union studying the methods used in training

recruits for the fishing fleet. Led by Lloyd J. Crabbe, Administrator of the Vocational Training Program, Industrial Development Service of the Canadian Department of Fisheries, the group visited the navigational and technical fishery schools at Murmansk and Rostov on the Don.

The tour resulted from a proposal of the Canadian Federal-Provincial Atlantic Fisheries Committee. Under a reciprocal arrangement, Soviet fishery officials will visit Canada in 1967 to study Canadian training methods.

The visit by Canadians follows one by the Norwegian Fisheries Minister with a group of experts; a visit by a Japanese team which spent a month aboard Soviet vessels; fishery research exchanges with Norway, Britain, and Iceland; and an October 1966 FAO seminar for trainees from 8 underdeveloped nations.



Denmark

GOVERNMENT BANK LOANS ROSE IN FISCAL YEARS 1965-66

The Royal Danish Fisheries Bank, a Government bank that makes loans to the fishing industry, received 244 loan applications in fiscal 1966, April 1, 1965-March 31, 1966--75 more than the previous year. The Bank made 168 loans in fiscal 1966 totaling 30.5 million kroner, US\$4.4 million, compared with 20 million kroner, \$2.9 million, in fiscal 1965.

Losses on loans during fiscal 1966 amounted to 37,805 kroner (\$5,481); total funds on loan increased to 137.3 million kroner (\$19.9 million). Loan payments amounted to 10.5 million kroner (\$1.5 million). Interest paid totaled 7.5 million kroner (\$1.1 million).

During fiscal 1966 the Bank financed loans by issuing two series of bonds paying 7 percent interest and one series paying 6 percent. (When a loan is approved, the fisherman receives bonds for the amount of the loan and must sell them to receive his funds.)

In October and November 1965, many applications were received for loans on large vessels. If the Bank had allowed loans for all

Denmark (Contd.):

Purpose	Fiscal 1966			Fiscal 1965		
	No. of Loans	Value		No. of Loans	Value	
		Kr. 1,000	US\$1,000		Kr. 1,000	US\$1,000
Purchase of:						
New vessels	94	21,335	3,093	64	11,549	1,675
Used vessels	26	2,355	341	14	1,403	203
New motors	29	1,560	226	9	287	42
Power block	1	68	9	-	-	-
Echo sounder	-	-	-	2	6	1
Industrial use	17	5,182	751	24	6,672	967
Reorganization loans for fishermen in difficulties	-	-	-	1	58	8
Marketing	1	20	2	5	89	13
Total	168	30,520	4,422	119	20,064	2,909

applications, its legal limit would have been reached rapidly. Thereafter, loans would have been limited to the amount repaid by debtors during the year, or about 10 million kroner. Therefore, following discussions with the Danish Fisheries Minister, the Bank management decided to control the rate of lending by instituting a priority system: Applicants needing immediate assistance would be favored over those with usable vessels.

The Bank has proposed legislation to the Fisheries Minister raising the program's legal limit. (U. S. Embassy, Copenhagen, Jan. 11, 1967.)

* * *

SOLVENT PROCESS CAN PRODUCE HIGH-QUALITY FISH MEAL

A Danish newspaper reports that a solvent-extraction process to remove smell and taste from fish meal has been developed by the technological laboratory of the Danish Fisheries Ministry. Cost of the process is competitive with other processes for producing high-protein mixtures. The process reduces oil content of fish meal making it more desirable as pig feed. (U. S. Embassy, Copenhagen, Jan. 10, 1967.)

* * *

REQUIRES DATE MARKING OF PRESERVED FISH

Starting January 1, 1967, all canned fish products sold in Denmark must bear a mark showing week they were produced. Either open marking or a code can be used on sterile canned products; but any code used on semipreserved items (those having a limited shelf life) must be understandable to the consumer. Also, semipreserved fish items must

be stamped "halvkonserves." The requirements apply to all such products, domestic or foreign. (U. S. Embassy, Copenhagen, Jan. 10, 1967.)



Iceland

1966 FISHERIES CATCH SET RECORD

The 1966 Icelandic fish catch (preliminary data) was a record 1.24 million metric tons compared to 1,199 million tons in 1965. The 1966 catch was (comparable 1965 data in parentheses): herring 775,000 (763,000) tons, capelin 125,000 (50,000) tons, groundfish 335,000 (381,000) tons, and lobster and shrimp 5,000 (5,000) tons.

The 1966 catch showed a slight increase due to larger herring and capelin catches. However the total export value probably will be substantially lower than 1965 because of lower quantity and prices for the groundfish catch and the decline in world market prices for fish oil and meal. The groundfish catch declined about 46,000 tons, one important reason for the difficulties of freezing plants and trawler industry.

Reasons for Smaller Groundfish Catch

The continuing decline in groundfish catch in recent years is attributed to declining fish stocks, lack of modern trawler fleet, and a shift to herring fishing. The considerable increase in capelin catch resulted from a greater effort by the fishing industry. It is considered a good development because capelin abound off Iceland's coast. Capelin are used primarily to produce fish meal and may compensate partially for any downturn in the

Iceland (Contd.):

herring catch. (U. S. Embassy, Reykjavik, Jan. 12, 1967.)

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GROUND FISH INDUSTRY FACES PROBLEMS

Heavy operating losses have been reported by the large trawlers (700-1,000 gross tons) that supply about 20 percent of the Icelandic groundfish catch. High costs and exclusion from Iceland's 12-mile fishing zone are blamed by the trawler operators for their losses. The Icelandic long-line and seine-net vessels that can operate within the 12-mile limit supply about 80 percent of Iceland's groundfish catch. However, those smaller vessels are being used more in the expanding herring fishery.

The Icelandic Government is reported considering measures to stimulate the groundfish industry.



Norway

1966 LANDINGS AND EXPORTS HIT RECORD

Heavy catches of herring by her modernized purse-seine fleet raised Norway's 1966 fishery landings to a record 2.64 million metric tons. The exvessel value was 1,304 million kroner (US\$183 million). These were increases of about 27 percent in quantity and 18 percent in value over the previous record catch in 1965.

The value of Norwegian exports of fishery products reached a new record in 1966 of 1,575 million kroner (US\$221 million). This was an increase of about 150 million kroner (US\$21 million) above 1965's record exports. (The Export Council of Norway, January 1967.)

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SCIENTISTS PREDICT DECLINE IN COD STOCKS

Scientists say that there may be poor years ahead for Norwegian fisheries for small cod in 1969 and 1970--and for fisheries on larger, sexually mature cod in 1973 and 1974. Stud-

ies of cod reproduction conducted by the Norwegian Institute of Marine Research show that the 1965 and 1966 year-classes failed seriously. Practically no reproduction of those year-classes was found. The reason is not known; however, it is assumed that some catastrophe occurred during spawning. Future research will seek the specific cause. ("Fiskaren," Jan. 11, 1967.)



West Germany

TO EXPAND FISHING OFF SOUTH-WEST AFRICA

West Germany will send 12 factoryships and trawlers to join 15 foreign nations now fishing off the coast of South-West Africa. Several German fishing companies have formed a consortium to own and operate a large distant-water fishing fleet. The 12 vessels will be a start.

The vessels will be ultramodern trawlers similar to the "Sagitta Maris" and "Weser" already operating off that coast. They will be fitted with filleting and fish-meal plants and will first concentrate mainly on white fish (hake). Later, they may turn to pilchards and, like the "Willem Barendsz" and "Kosmos V," operate a fish-meal factoryship for pilchards off that coast.

The new West German fleet will be headed by the Government's modern fisheries research vessel "Walther Herwig," which will carry out intensive fisheries research in those waters.

The research vessel and part of the fleet are expected in those waters within the next month or two. ("Namib Times," Walvis Bay, Jan. 13, 1967.)



Ireland

AIMS TO DOUBLE FISHERIES EARNINGS BY 1970

One of the main goals of an expanded fisheries aid program recently outlined by the Irish Government is to double the earnings of its fisheries. At present, Ireland is limited

Ireland (Contd.):

mainly to inshore fishing yielding an annual catch of 30,000 to 40,000 metric tons. However, this modest catch provided export earnings of US\$5.5 million in 1965.

The Government will encourage construction of middle-distance vessels--two 107-foot stern trawlers were added in 1966--to expand the fleet. Government programs will be broadened in credit, training, product development, and export promotion. Compulsory standards will be introduced to regulate fish handling from the catching point through the entire distribution system. The Irish Minister for Agriculture and Fisheries said it was necessary to develop a "quality image" for Irish export products. ("Irish Skipper," January 1967, and other sources.)



Poland

TO EXPORT CANNED LAMPREYS

A Polish fishery cooperative has begun to produce canned lampreys for export via the state-owned foreign trade firm "Animex." Lampreys are landed mostly in the lower section of the Vistula River. So far, they have been used principally to make a marinated product. ("Polish Maritime News," Dec. 1966.)



Greece

FROZEN FISH LANDINGS INCREASED IN 1966

The Greek Atlantic freezer-trawler fleet landed 26,637 metric tons of frozen fish in the first 11 months of 1966, compared to 23,918 tons in the 1965 period.

The Government has proposed setting up a State-controlled company to distribute frozen fish in domestic and foreign markets. Most private Greek firms fishing in the Atlantic would participate in the new distributing firm with the option of eventually taking

it over. The object is to improve distribution and avoid the excessive buildup of frozen fish supplies that has occurred in the past. The Government also hopes to expand eventually trawling operations in offshore waters.

Shrimp fishing in both the Persian Gulf and the North African area yielded disappointing catches in late 1966. However, Persian Gulf fishing improved in December 1966. A Greek firm engaged in shrimp fishing there is reported to have acquired two more shrimp trawlers. ("Alieia," Dec. 1966.)



Italy

EEC APPROVES 30,000-TON DUTY-FREE TUNA IMPORT QUOTA

Japanese frozen tuna organizations say the European Economic Community (EEC) has agreed to revise Italy's frozen tuna import tariff system. EEC will authorize an increase in the duty-free frozen tuna import quota from the present 14,000 metric tons to 30,000. However, EEC reportedly proposed that even within the 30,000-ton quota, duty be levied on frozen tuna bought at prices below the standard US\$340 a metric ton c.i.f. established by EEC. In this case, duty would be paid on the difference between the two prices.

At present, Italy permits frozen tuna imports from non-EEC countries free of duty up to 14,000 metric tons; she assesses an ad valorem duty of 0.5 percent from 14,000-45,000 tons, and 15 percent over 45,000 tons.

It is reported that Japan, at the Kennedy Round in Geneva, plans to oppose EEC's establishment of the price standard. If unsuccessful, she intends to seek removal of skipjack from the proposed tariff. Japan also plans to seek a tariff reduction on her canned tuna in oil exports to EEC countries, presently assessed a 25-percent ad valorem duty. ("Nihon Suisan Shimbun," Jan. 30; "Suisan Tsushin," Jan. 27, 1967.)



ASIA

Japan

PURSE-SEINE TUNA FISHERY GAINS ATTENTION

Japanese distant-water purse-seine fishing is attracting wider attention as a way of improving tuna fishery management. It had been overshadowed by the growing high-seas trawl fishery. Some suggest that purse-seine operators should organize an overseas association to smooth operations.

At present distant-water purse seining is conducted experimentally in the eastern Atlantic off West Africa and in the South Pacific. The Atlantic operations began in late 1964 when Nichiro Fishing Company applied for a license to fish in the Gulf of Guinea with the 140-ton vessel "Kuroshio Maru" led by the 1,500-ton mothership "Chichibu Maru." The firm reportedly lost money during the first 2 years. But in summer 1966, when it added 2 more efficient two-boat seiners, "Hakuryu Maru" and "Seisho Maru," it managed to pull out of the red.

Taiyo Began Purse Seining in 1964

In the South Pacific, in spring 1964, Taiyo Fishing Company conducted the first purse-seine fishing with the power block-operated "Kenyo Maru" of 240 gross tons. Later, more seiners entered the fishery. Now it is reported that 6 vessels are engaged in the purse-seine fishery. Taiyo is building a 275-ton vessel to replace the Kenyo Maru. Another firm has ordered a large 350-ton seiner for the South Pacific.

The growing interest in this fishery is attributed to the average production per crew member on a purse seiner of around 60 metric tons per trip. This compares with 40 tons on a pole-and-line skipjack vessel and 18 tons on a long-liner. However, since the seine-caught fish are predominantly skipjack, there is a need to create greater market demand for them. Moreover, purse-seine operators face unstable fishing conditions -- with catches some days running from zero to as high as 200 tons. So, unless fishing operation is coordinated with transportation by carriers, the owners will lose money. ("Suisan Keizai Shimbun," Jan. 16, 1967, and other sources.)

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TUNA PURSE SEINING OFF NORTHWEST AFRICA IMPROVES

Purse-seine fishing for tuna by one Japanese company's 3 seiners off West Africa picked up in December 1966 after a slight slowdown in November. Catches were mostly large yellowfin, with landings of up to 300 tons per vessel in 2 days of fishing.

Most catches were exported to the U. S. because of weakening demand in Italy. Mid-December price of gilled and gutted yellowfin for delivery to West African ports was US\$440 a short ton, down \$10-15 a ton from November. ("Suisan Tsushin," Dec. 16, 1966.)

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TUNA FLEET BASED IN AMERICAN SAMOA IS REDUCED

The Japanese tuna fleet based in American Samoa on January 1, 1967, totaled 25 vessels, a decline of 10 from early December 1966. In contrast, the Formosan fleet based there increased from 64 to 68 vessels, and the South Korean from 55 to 56 during the same period.

The sharply reduced fishing operations and higher operating costs of Japanese vessels, compared to the other two, are said to have considerably weakened Japan's position in negotiating tuna prices with U. S. packers in Samoa. ("Katsuo-maguro Tsushin," Jan. 18, 1967.)

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SCIENTIST SUGGESTS ARTIFICIAL PROPAGATION OF TUNA

A Japanese tuna researcher suggests that tuna can be artificially propagated as a means of increasing production. Dr. Motoo Inoue, Fishery Research Laboratory, Tokai University, claims that tuna can be artificially bred, nurtured, and released. He urges Japan to take the initiative in launching a tuna hatchery project with international cooperation in the equatorial Pacific where atolls, reefs, and lagoons could be utilized as hatcheries and sea farms. (Private correspondence.)

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Japan (Contd.):

ADOPTS 80,000-TON FROZEN TUNA QUOTA TO U. S.-CANADA

The Japan Frozen Tuna Producers Association adopted at its January 25 meeting a direct export quota totaling 80,000 short tons of frozen tuna for the United States and Canada in business year 1967 (April 1967-March 1968). The 80,000-ton quota consists of albacore 35,000 tons, yellowfin 35,000 tons, and 10,000 tons reserved. Of the 35,000-ton quota, 32,600 tons are to be allotted to exporters on the basis of performance over the past three years, 12,250 tons are unassigned, and 150 tons are for newly authorized firms. The BY 1967 quota was 5,000 tons over 1966's quota based on a 10-percent increase in U. S. canned tuna consumption in 1966. ("Suisan Keizai Shimbun," Feb. 1, "Suisancho Nippo," Jan. 27, 1967.)

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FROZEN TUNA EXPORT QUOTAS SET FOR BY 1967

The Japanese Frozen Foods Exporters Association agreed at the January 26 meeting ("Suisan Tsushin," Jan. 28, 1967) to set the following frozen tuna export quotas for business year 1967 (April 1967-March 1968):

Area I (U.S.-Canada)	-	110,000 short tons
Area II (Europe and Other Countries)	-	70,000 metric tons
Overseas Bases:		
American Samoa	-	25,000 short tons
Espiritu Santo	-	6,000 " "
Fiji Island	-	9,000 " "
Penang (Malaysia)	-	6,000 " "
Saint Martin (West Indies)	-	2,000 " "

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FROZEN TUNA EXPORT PRICES WEAKEN

Despite declining tuna catches, prices of Japanese frozen tuna exports in late January 1967 continued to weaken, with U. S. packers showing no buying interest. One offer for US\$520 a short ton c.i.f. was received from a U. S. packer for frozen round albacore for direct export to the United States. But other than that, no new bids were received from U. S. buyers. In contrast, exvessel albacore prices in Japan have been rising gradually and were quoted in late January at 189 yen a kilogram (\$476 a short ton).

Prices of yellowfin (gilled and gutted) for direct export to the U. S. reportedly declined

to \$470 a short ton c.i.f., but even at that price U. S. packers were not showing much interest.

Atlantic-caught albacore prices were reported below \$440 a short ton f.o.b. Las Palmas, down more than \$60 a ton from the high of \$500 a ton reached in September 1966. ("Suisan Tsushin," Jan. 24, 1967.)

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FROZEN TUNA EXPORT VALIDATIONS ROSE IN 1966

Frozen and fresh tuna validated for export in November 1966 totaled 19,867 metric tons--over 2½ times more than the 1965 exports of 7,687 metric tons. Exports for April-November 1966 were 127,565 metric tons, compared with 116,565 tons for the 1965 period. ("Suisan Tsushin," Dec. 28; "Suisancho Nippo," Dec. 23, 1966.)

	U. S.-Canada	Overseas Bases	Other Countries	Total
Tuna:	. . . (Short Tons) 1/ (Metric Tons) . .	
Albacore 2/	6,988	4,024	299	10,289
Yellowfin 3/	3,643	808	2,386	6,425
Big-eyed 3/	67	367	789	1,183
Skipjack 2/	1,339	-	249	1,463
Bluefin 3/	-	-	3	3
Tuna loins	555	-	-	504
Total	12,592	5,199	3,726	19,867

	U. S.-Canada	Overseas Bases	Other Countries	Total
Tuna:	. . . (Short Tons) 1/ (Metric Tons) . .	
Albacore 2/	36,846	11,661	3,145	47,151
Yellowfin 3/	29,354	5,714	25,976	57,789
Big-eyed 3/	1,745	1,186	7,493	10,151
Skipjack 2/	6,428	9	1,727	7,567
Bluefin 3/	-	-	1,321	1,321
Tuna loins	3,953	-	-	3,586
Total	78,326	18,570	39,662	127,565
Apr.-Nov. 1965	80,743	7,898	36,100	116,565

1/To convert short ton to metric ton, multiply by 0.9072.

2/Round fish.

3/Gilled and gutted, dressed, and fillets.

* * *

Japan (Contd.):

BOAT-CARRYING TUNA MOTHERSHIP TO FISH IN INDIAN OCEAN

When the 2,800-gross-ton Japanese vessel "Kaigata Maru No. 58," serving as a carrier in the Antarctic whaling operation, returns to Japan in March, she will be converted to a six-boat-carrying tuna mothership. The owners are preparing to send the vessel to the Indian Ocean in April under a two-trip-a-year operational plan. Production goal is over 500 million yen (US\$1.4 million) worth of fish in the first year. ("Katsuo-maguro Tsushin," Jan. 9, 1967.)

* * *

TUNA CATCHES ARE DECLINING IN ATLANTIC AND INDIAN OCEANS

Japanese tuna catches in the Atlantic and Indian Oceans began to decline in mid-January. In the Atlantic, fishing fell off in all grounds except north of Saint Martin Island (West Indies, east of Virgin Islands) where albacore catches of around three tons a day were being landed. Off Brazil, where most Japanese long-liners were operating daily, catches averaged 2-2.5 tons of fish, mainly albacore.

In the Indian Ocean, where over 100 tuna vessels are fishing, landings averaged about 2 tons of fish a day. Vessels working the western grounds have nearly all switched from albacore to yellowfin. ("Suisan Tsushin," Jan. 24, 1967.)

* * *

ADOPT 1967 EXPORT QUOTAS FOR SWORDFISH AND TUNA LOINS

The Japan Frozen Foods Exporters Association adopted an 8,000-ton quota for tuna loin exports to the U. S. in business year (BY) 1967 (April 1967-March 1968). This year's quota was reduced 1,000 tons from last year's because actual exports for BY 1966 were expected to fall considerably below the established quota.

The Association's swordfish committee decided on a 5,500-ton swordfish quota for BY 1967 exports to the U. S. ("Suisancho Rippo," Jan. 23, 1967.)

* * *

VESSEL OWNERS TO HIRE OKINAWANS

To alleviate a serious labor shortage confronting fishing vessel owners, the Yaizu Fishery Cooperative Association was scheduled to dispatch on January 19 three Association members to Okinawa on an 8-day recruiting trip. The team was to visit local high schools and junior high schools to interview graduating students interested in working aboard fishing vessels. The Association hoped to recruit about 80 students. ("Minato Shimbun," Jan. 17, 1967.)

* * *

ANTARCTIC WHALE CATCH NEARS THIRD OF QUOTA

Japan's 3 whaling firms (4 fleets in the Antarctic) reported as of January 5 a catch of 448 blue-whale units since the Antarctic whaling season opened December 12, 1966. The catch of sperm whales was 297, producing 1,514 tons of sperm oil. Japan's quota of blue-whale units this season is 1,633. It was 2,340 units last season. ("Yomiuri," Jan. 9, 1967.)

* * *

ATLANTIC TRAWL FISHERY IS GOOD

There were about 70 Japanese distant-water trawlers in the Atlantic Ocean in early January 1967--about 60 of them concentrated off northwest Africa fishing primarily for octopus. The octopus fishing season, which begins around November, was at its height; good fishing was reported. Catches by 1,500-ton trawlers were 10-15 metric tons a day. After the octopus season ends in March, the vessels will switch to squid.

Trawlers off Africa's southern coast, where catches consist mostly of "merluza" (hake) and sea bream, were having good fishing. Daily landings were over 20 tons of merluza and 10-12 tons of sea bream.

The Atlantic trawl catch in 1967 is expected to reach 200,000 metric tons. Production in 1966 was 180,000 tons (estimate); in 1965, 160,000 tons; in 1964, 122,000 tons. ("Minato Shimbun," Jan. 5 & 6, 1967.)

* * *

Japan (Contd.):

OWNERS OF SEIZED VESSELS WANT TOKYO TO REPAY FINES

Japanese fishery circles, disturbed by mounting seizures of vessels in recent years by countries claiming new territorial sea limits or exclusive fishing zones, are asking the Government to provide relief to vessel owners fined by such countries. These spokesmen say that because Tokyo adheres to the 3-mile principle and does not recognize exclusive fishing zones established unilaterally, it should compensate owners for fines imposed on their vessels stopped outside the 3-mile limit.

The Fishing Vessel Insurance Law of Japan compensates for vessel damages in war, rebellion, confiscation, seizure, detention, surface and underwater explosions; but it does not allow reimbursement of fines. Some industry members say the Government should enact a law similar to the U. S. Fishermen's Protective Act. ("Minato Shimbun," Jan. 17, 1967.)

* * *

MACKEREL FISHERMEN FIGHT OVER TYPE OF GEAR

The mackerel fishing dispute between the pole-and-line fishermen and surrounding-net operators on the Pacific coast of Choshi, east of Tokyo, continued unresolved through December despite mediation efforts of the Fisheries Agency. It had begun early in the month. The flare-up occurred when the two factions accused each other of violating the fishing adjustment agreement concluded in spring 1966. At one time, the dispute threatened to erupt into violence, with 250 pole-and-line mackerel boats protesting in Tokyo Bay and fishermen holding rallies. The pole-and-line vessel owners contend that net fishing is ravaging the resource, causing extreme hardship for their fishermen, and are demanding that the Government act to prohibit nets in the local mackerel fishery. ("Suisan Keizai Shimbun," Dec. 23, 1966, and other sources.)

* * *

FIRM WILL BUILD TWO 4,000-TON STERN TRAWLERS

Two 4,000-gross-ton stern trawlers, reported the largest of their kind in Japan, are

scheduled to be built starting in mid-February at a Japanese shipyard for Nihon Suisan Fishing Company at a total cost of US\$5 million. Completion is set for late December 1967 for the first vessel, and late February 1968 for the second. That firm also plans to build a 500-ton trawler this year at an estimated cost of \$722,222. Construction was scheduled to begin in early February and completion set for late July. ("Minato Shimbun," Jan. 1967.)

* * *

FISHERMEN SEEK TO LONG LINE IN GULF OF ALASKA

The Japanese Northern Water Longline and Gillnet Fishery Council has proposed that the Government extend the northern water operational area from the Bering Sea region (north of 50° N. latitude between 170° E.-175° W. longitudes) to the Gulf of Alaska. The proposal was adopted at a January 13, 1967, meeting to develop plans for 1967.

On January 14, the proposal was presented to the Agriculture and Forestry Ministry. The Council has 16 firms operating 19 catcher vessels in the Bering Sea bottomfish fishery.

The Council maintains that its vessels, which primarily fish for sablefish, operate gear at depths beyond 400 meters (200 fathoms) and, therefore, there is virtually no possibility that halibut would be taken from the Gulf as feared by the U. S. and Canada. ("Suisancho Nippo," Jan. 16; "Shin Suisan Shimbun Sokuho," Jan. 14, 1967.)

* * *

PRODUCES FISH BLOCKS FOR U. S.

Within the past year, Japan has begun to produce frozen blocks of fillets processed from South Atlantic hake or whiting for export to the U. S. This new product could have future significance in the Japanese export trade or domestic markets.

In 1959, Japan began to trawl commercially off the west coast of Africa. This fishery grew rapidly: production in 1964 was 122,000 metric tons, 160,000 tons in 1965, and 180,000 tons in 1966. Initially, domestic demand for squid, octopus, and sea bream from African waters almost supported the operation of the vessels.

Japan (Contd.):

The method of processing hake into frozen blocks of fillets is that used by other countries. In the north Atlantic, in 1963, Taiyo Fishery Company conducted a trial processing of filleted cod, haddock, and ocean perch into frozen fish blocks. At present, Taiyo is the only Japanese company producing fish blocks aboard factoryships at sea.

Note: This new leaflet contains a diagram illustrating the method of processing hake into fish blocks at sea. It is FFL-110--"PRODUCTION OF FISH BLOCKS IN JAPAN"--available free from the Branch of Foreign Fisheries, BCF, Room 8015, U.S. Department of the Interior, Washington, D. C. 20240.

* * *

FISH MEAL PRODUCTION BY
NEW PLANT IS 1,000 TONS

In 1966, the largest fish meal plant in Kyushu, Japan, processed fish meal and fish solubles totaling 1,491 metric tons valued at 54.8 million yen (US\$152,000). The plant was built by the Makurazaki Fish Products Processors Cooperative Association in December 1965 at Makurazaki, Kagoshima Prefecture.

Fish meal comprised 963 tons worth \$112,305, fish solubles 392 tons worth \$24,916, and fish oil 136 tons worth \$14,945. The plant processes scraps from "katsuobushi" (dried skipjack loin) establishments in Kyushu. ("Minato Shimbun," Jan. 6, 1967.)

* * *

1966 LANDINGS AT YAIZU REACHED
ALL-TIME HIGH IN VALUE

Fish landings in 1966 at the major Japanese fishing port of Yaizu totaled 169,032 metric tons valued at 22,613,460,000 yen (US\$62.8 million). This was a substantial increase over 1965 receipts that totaled 149,168 tons worth 17,724,414,000 yen (\$49.2 million). The value of landings was the highest for Yaizu and also topped other ports.

While albacore receipts at Yaizu declined by 9,279 tons compared with 1965, the record value of landings was attributed to the increase in landings of other species--skipjack tuna (up 25,276 tons over 1965), mackerel (up 3,566 tons), and bluefin tuna, including yellowfin and big-eyed (up 122 tons). Another factor was the better quality fish brought back because of improved freezing systems

on vessels and the resultant higher prices. ("Minato Shimbun," Jan. 6, 1967.)

* * *

BAIT SAURY PRICES UP

Prices of bait saury for the tuna long-line fishery rose sharply in early December 1966 and were expected to reach a high of 170-180 yen per kilogram (US\$428-454 a short ton) exvessel. Tuna vessel owners were concerned over the rising cost of this extensively used bait but hoped to obtain sufficient supply for 1967.

Japanese saury production in 1966, on December 15, was 235,000 metric tons, a slight increase over 1965 landings of 227,000 tons. Because the fish harvested were larger, much production was sold to the fresh fish market at around 150 yen per kilogram (\$378 a short ton) exvessel. ("Shin Suisan Shimbun Sokuho," Dec. 17, 1966, and other sources.)

* * *

HERRING ROE PRICES SKYROCKET

The tremendous year-end demand in Japan for herring roe, a traditional New Year's delicacy, drove prices up to fantastic levels. In Tokyo's retail market, dried herring roe sold for 1,500-2,000 yen per 100 grams (US\$18.94-25.25 a pound) and herring roe in brine 400-550 yen per 100 grams (\$5.05-6.94 a pound). Although 1966 prices dropped 30-40 percent below 1965 prices due to good domestic herring production and increased imports, the product is still beyond the reach of the average consumer.

Herring roe imports into Japan, Government controlled, are handled by about 200 trading firms, and their number is increasing. Because some firms may even form dummy companies to establish import rights, the Government intends to limit drastically the issuance of import licenses in 1967 to about 30 firms in 1967, based on past performance. ("Suisancho Nippo," Dec. 22; "Nihon Suisan Shimbun," Dec. 21, 1966.)

* * *

TO BUY MORE SHRIMP FROM PAKISTAN

A team from Marubeni-Iida, Nissho Trading Co., Osaka Branch Japan Export-Import

Japan (Contd.):

Bank, and the Ministry of International Trade and Industry (MITI) will go to Pakistan to study ways of promoting the purchase of primary products in order to overcome the latter's present trade imbalance with Japan. Since shrimp is a major fishery product and a large resource, it will receive considerable attention.

In 1965, Japan purchased 206 metric tons of shrimp from Pakistan worth about US\$354,000. In first-half 1966, purchases amounted to about \$223,000. With the growing domestic demand, increased imports of quality shrimp will find a good market. (Fishery Attaché, U. S. Embassy, Tokyo, Jan. 25, 1967.)

* * *

SENDS SURVEY TEAM TO PERU AND MEXICO

The Japan Fisheries Resource Conservation Association sent two members to Peru and Mexico on January 21 for a one-month fishery survey. In Peru, they will study fishery conservation programs, and the anchovy fishing and fish meal industry to improve Japan's fish food supply for cultured fish. In Mexico, they will study the shrimp fishing and processing industry, government policy, and research programs to gain knowledge on ways to promote Japan's shrimp fishery development. ("Suisan Keizai Shimbun," Jan. 11, 1967.)

* * *

HELPS DEVELOP FISHERIES IN PERU AND ECUADOR

The Japanese Ministry of Construction has established an International Construction Technological Association to help develop fisheries in Peru and Ecuador. A 5-member team left January 6, 1967, to study construction of a fishery terminal in Peru and the export of canned fish from Ecuador.

Although Peru is the world's No. 1 fishing nation, the Association noted that present production is almost entirely fish meal. Peru now plans to develop actively tuna and other resources for food. Three new fishery terminals will be built: Paita (or Boyovan), Callao, and Mollend--each with cold-storage

and processing facilities to provide fish for distribution to interior towns and villages. In May 1966, the fisheries firm Promotra de Pesca was established to manage the terminals.

Ecuador To Develop Canned Tuna

In Ecuador, plans call for developing canned tuna for export; they will develop the fisheries and prevent seasonal unemployment. The Atlantic Community Development for Latin America will help build the canneries and develop export markets.

The Japanese study is subsidized by the Japanese Ministry of International Trade and Industry (MITI) and will take 47 days. The Association believes that Latin American fisheries will grow. It wants to give technical assistance--but also to find markets for Japanese machinery and material. (Fishery Attaché, U. S. Embassy, Tokyo, Jan. 12, 1967.)

* * *

SECOND FIRM EXPLORES FOR SHRIMP OFF NORTHERN AUSTRALIA

The Nihon Suisan firm plans shrimp explorations north of Australia in March. It will use its stern trawler "Asama Maru" (1,000 gross tons) now harvesting mainly sea bream off northeast Australia. If the operation proves successful, Nihon Suisan plans to enter into a joint shrimp venture with an Australian firm.

In early summer 1966, another Japanese fishery firm, Kyokuyo Hoge, licensed by the Fisheries Agency to conduct experimental shrimp fishing in the Gulf of Carpentaria, northern Australia, showed good results. ("Minato Shimbun," Jan. 28, 1967.)

* * *

JAPAN-U. S. FISHERY VENTURE PLANNED IN ALASKA

The Japanese fishery firm Hoko Suisan and trading firm Marubeni Iida are reported seeking the Japanese Fisheries Agency's approval to enter into a joint venture with the American TAD Fishing Company of Seward, Alaska. The joint company is scheduled to be formed in April 1967 with capital of US\$500,000--the Japanese firms contributing 49 percent and the U. S. partner 51 percent. The proposed enterprise will engage primarily in exporting locally caught shrimp and

Japan (Contd.):

king crab to Japan, with plans to add halibut and salmon to the export list. One-third of the products will be marketed locally. ("Suisancho Nippo," Jan. 27, 1967.)



Taiwan

PLANS TO EXPAND TUNA FISHERY

The Formosan (Taiwanese) tuna fishing industry, which has grown rapidly in recent years, may establish overseas bases this year to serve its expanding distant-water tuna fleet. The fleet now numbers over 100 vessels. The Formosan tuna fishermen have been using Japanese bases but are reported dissatisfied and eager to have their own.

Indications are that Formosa will establish 1 or 2 fishing bases in the Indian Ocean in 1967 with capital coming mostly from Chinese merchants in southeast Asia. Japanese financial and technical assistance also may be sought.

Central Buying Agency May Be Set Up

The tuna industry also is reported planning, with government support, to establish a centralized gear and bait purchasing agency. Japanese trading firms providing supplies to Formosan vessel owners under cooperative arrangements would lose good trading items. They may even find themselves in a bad bargaining position.

Formosa, like South Korea, exports most of her tuna catches to the U. S. Japanese observers view the growing emphasis on Formosa's tuna fishery as strengthening the latter's position in the international tuna market. They also fear that this trend will have a tremendous impact on Japan and may, in 2 years, dislocate the Japanese tuna industry. ("Minato Shimbun," Jan. 20, 1967.)



Republic of Korea

SELECTS PRIORITIES FOR NEXT 5 YEARS

The government of South Korea has selected 20 priority projects it hopes to carry out during the next 5 years with a US\$300 million development loan from AID. The loan includes \$16 million for fishery development. The loan will be added to West European loans and Japanese reparations to modernize Korea's coastal fisheries and expand her high-seas fishing.

In 1966, Japanese reparations used for fisheries amounted to \$9.5 million: \$5.6 million for processing facilities and ports, \$3.7 million for vessel construction and purchase of gear, and \$0.2 million for machinery and parts.

To promote exports of fishery products, South Korean Export Promotion Committee recommended extension of export credits from 3 to 6 months--and importation of tin cans until domestic output is assured at reasonable prices. ("Korean Business Review," vol. 1, no. 8, Dec. 1966.)



Philippines

TO EXPAND FISHPOND INDUSTRY

To increase the production of fish, the No. 2 food staple, President Marcos of the Philippines has moved to open 700,000 hectares of public domain to fishpond development.

On January 17, 1967, the President appointed a permanent committee to study and expedite the opening of these lands to private developers. Committee members are: the Secretary of Agriculture and Natural Resources, Chairman; the Chairman of the Development Bank, Vice Chairman; Undersecretary of Agriculture for Natural Resources, and the directors of the Bureaus of Fisheries, Forestry and Lands. (U. S. Embassy, Manila, Jan. 22, 1967.)



Australia

TASMANIA LIMITS SPINY LOBSTER FISHING LICENSES

Pending the results of an economic survey now underway of the State's spiny lobster fishing industry, the Tasmanian Government has limited commercial spiny lobster pot licenses to a maximum of 420. The Minister for Fisheries reported 388 boats licensed to take spiny lobster and others recommended for licensing. With more boats in the industry and others trying to enter, a survey of trends became necessary.

Statistics have shown a decline in the number and weight (lbs.) of spiny lobster per pot lift.

At present, the number of pots a licensed boat can carry is limited and there are sound reasons for limiting the number of boats entering the fishery.

Fishermen Accept Plan for Higher Fees

The Professional Fishermen's Association (PFA) had accepted proposals for higher licensing fees in 1967 and it was proposed to channel this money into research on the State's fisheries. In 1965, PGA urged the Government to freeze the number of licenses for spiny lobster pots.

Present controls do not apply to other forms of fishing and there is no restriction on the number of boats taking shark, finfish and pelagic fish, scallops, and abalone. However, certain areas were closed to shark and scallop fishing.

Future licenses would be restricted to a master fisherman operating one boat licensed in his name. The qualifications for the master license have been strengthened. However, a ceiling would remain on the maximum number of licenses issued.

The Minister anticipated completion of the economic survey in the first half of 1967. The Government's position on future licenses would be determined then. He said it was the Fisheries Department's responsibility to insure the full exploitation of the resource at a maximum sustainable catch. It was equally

important for the industry to function on a sound economic basis. ("Australian Fisheries Newsletter," Dec. 1966.)



New Zealand

FISH MEAL PLANTS PLANNED

Plans for a US\$1,430,000 fish meal plant that could be operating in the Bay of Islands, in the North Island of New Zealand, before the end of 1968 have been put before the Government.

The plant could process 2,000 tons of fish a day for meal and oil, but initial plans are for half this quantity. This proposal by a private firm is for 3 other plants to be established progressively over a period of 6 years at 3 other places--tentatively suggested at Gisborne, Nelson, and the west coast of the South Island.

Each factory would be highly mechanized and be built where they would be no threat to health or scenic beauty. ("Fishing News International," Jan. 1967.)



New Guinea

JAPANESE-AUSTRALIAN FIRM TO FISH SHRIMP

The Japanese Kinkai Hogeï Fishing Company, in a joint venture with an Australian trading company, was planning to dispatch a remodeled 350-gross-ton freezer vessel to New Guinea in late February to explore the coastal waters for shrimp, spiny lobster, and sea bass. The Japanese firm plans to ship the catches home, but it was also considering exporting to the U. S. shrimp and lobster--if they are available. Fishing season for sea bass, reported abundant, peaks around May-June. ("Suisan Tsushin," Jan. 13, 1967.)



AFRICA

South Africa

PELAGIC FISH CATCH DROPPED IN 1966

The total pelagic fish catch in South African waters for the 1966 season dropped from the 529,035 tons in 1965 to 394,517 tons. During 1966, there was an even greater reliance on anchovy--43.9 percent of the total catch. This compared with 36.8 percent in 1965, and 31.6 percent in 1964, when anchovy were first caught as a substitute for the declining Cape pilchard catches.

The situation is further aggravated by the fact that anchovy, although an acceptable substitute, yields considerably less oil than pilchard. The 1966 fish oil yield was estimated to average 7 gallons per ton, as against 11 gallons in 1965. Fish body oil sales, moreover, recently have been yielding 25 percent less than in 1966; this is attributable mainly to heavy production in Iceland.

Meanwhile, prices for fish meal have declined steeply as a result of Peru's active participation in pelagic fishing after her 3-month closed season during 1966. Also, South and South West Africa's position in the American spiny lobster market is facing competition from Brazil, Thailand, and Japan. This has not yet had much effect, however, on the income derived from exports of the local product. ("Barclay's Trade Review," Johannesburg, Dec. 1966.)



Ivory Coast

FISH CATCH DROPPED IN 1966

Abidjan's 70-vessel commercial fishing fleet landed 33,945 metric tons of fish and shellfish in the first 10 months of 1966--down 4.3 percent from the 1965 period. This decrease resulted largely from the poor sardinella catches in the first 4 months.

Administrative delays held up the call for bids to construct the second quay at Abidjan's fishing port. It now is expected to be advertised early in 1968. Latest reports indicate that the new 3,000-ton fish freezing plant may be started in April 1967 and completed in

March 1968. Its design and specifications have been under review by an American consulting engineer. (Fisheries Attaché, U. S. Embassy, Abidjan, Jan. 25, 1967.)



Mauritania

SEIZES JAPANESE TRAWLER

The 999-gross-ton Japanese trawler "Daishun Maru," operating off northwest Africa near Cape Blanco, Mauritania, was seized by the Mauritanian Coast Guard January 3, 1967, for fishing inside the 12-mile exclusive fishing zone. The Japanese Foreign Ministry protested and was seeking immediate release of the vessel.

This is the second Japanese vessel seized by Mauritania. In January 1966, the stern trawler "Taiyo Maru No. 71" (1,500 gross tons) was captured and fined the equivalent of 6 million yen (US\$16,666), which was later reduced to 1.5 million yen (\$4,166). ("Minato Shimbun," Jan. 8, 1967.)



Nigeria

CLAIMS 12-MILE TERRITORIAL WATERS

A decree would soon extend Nigeria's territorial waters from 3 to 12 miles "for all purposes," the Federal Military Government (FMG) said on January 3, 1967.

Two reasons were given: (1) the Ministry of Agriculture and Natural Resources is concerned about fishing trawlers operating off Nigeria's coast beyond the present 3-mile limit. In August 1966, the captain of Nigeria's research vessel "found about 17 Soviet trawlers fishing from 6 to 12 miles off our coast within a distance of 20 miles of either of the Bonny Rivers." These vessels, the FMG statement added, were not registered in Nigeria. The Government believes "that each regional government is at liberty to legislate in respect of fishing and fisheries within the territorial waters adjacent to its coast." If that is done, it will "be possible to ensure

Nigeria (Contd.):

that only Nigerian registered fishing vessels¹¹ will be permitted to fish the waters adjacent to Nigeria.

(2) Extending Nigeria's territorial waters would permit intensification of antismuggling operations. Now smugglers enjoy some immunity because of the 3-mile limit. (U. S. Embassy, Lagos, Jan. 5, 1967.)



Senegal

SOVIETS SUPPLY TUNA VESSELS

Representatives of the Soviet firm "Promachexport" contracted with the Government of Senegal to furnish the Société Sénégalaise de Pêche 10 refrigerated tuna fishing vessels worth 882,000,000 CFA francs (US\$3.6 million).

This is the first Soviet step to implement its loan agreement of March 22, 1965, of 1,650,000,000 CFA francs (\$6.73 million) to develop the Senegalese fishing industry.

The press reported that the vessels, over 100 feet long, will be constructed in Kiev and powered by French motors. They are scheduled for delivery to Dakar in 1968, 1969, and 1970. (U. S. Embassy, Dakar, Jan. 27, 1967.)



Foreign Fishing Off U. S. Coasts, January 1967

OFF ALASKA

Soviet: During January, Soviet fishing and support vessels increased from slightly over 100 to about 130.

Early in the month about 30 fishing and support vessels fished and processed Pacific ocean perch in the eastern part of the Gulf of Alaska off Yakutat. By mid-month, that fleet increased to over 45 vessels, concentrating off southeastern Alaska; by month's end, it was down to the initial 30, and switched to the Fairweather fishing grounds.

Ocean perch fishing in the central Gulf was limited: 3 trawlers operated on Albatross Bank during mid-month, and only 1 remained at month's end. One trawler fished near Chirikof Island in late January. The perch fleet between Shumagin Islands and Unimak Pass in the western Gulf increased from 7 to 14 trawlers and 3 support vessels during the first 2 weeks, then decreased to 6 trawlers and 1 support vessel by month's end. The decrease in vessels fishing for perch in the Gulf of Alaska during January probably resulted from a shift to the flounder fishery in the eastern Bering Sea.

Shrimp fishing on the Continental Shelf surrounding the Shumagin Islands continued at high level throughout the month. The trawlers increased from 18 to 21, and their catches continued to be processed by a canning factoryship.

The winter herring fishery north of the Pribilof Islands apparently has failed to develop for the second consecutive year. Only 5 trawlers and 3 support vessels are known to have been active during January.

The eastern Bering Sea flounder fishery continued to expand in January with a fleet of about 50 trawlers and 20 support vessels active by month's end. Most vessels fished just north of Unimak Island, but in late January a small part of the fleet moved north toward Cape Newenham.

Japanese: The number of vessels fishing off Alaska remained at 18 throughout January.

In early January, Japanese ocean perch operations off Alaska were conducted by one factory trawler, the "Kirishima Maru" off Southeastern Alaska, and by the factory trawlers "Zuiyo Maru No. 2" and "Ryuyo Maru" and one reefer south of Fox Islands in the eastern Aleutians. By mid-month, operations in both areas had ended. The perch fishery on Albatross Bank resumed about mid-month and, by month's end, the factory trawlers "Yutaka Maru," "Ryuyo Maru," and "Daishin Maru No. 12" were active.

In early January, the Japanese Alaska pollock fishery north of Fox Islands was conducted by the factoryship "Chichibu Maru" accompanied by about 8 trawlers and by the factory trawlers "Aso Maru" and "Tenyo Maru No. 3" (and her accompanying trawler).

About mid-month, those vessels were joined by the factoryship "Soyo Maru" and the factory trawler Zuiyo Maru No. 2. It is possible that the factoryship arriving about mid-month was accompanied by a fleet of trawlers, or she may have served as a support vessel for trawlers already active.

Two Japanese long-line vessels fished for sablefish off the coast of Southeastern Alaska during the first week of January. The number decreased to one (the "Tenyo Maru No. 18") the second week. It is believed operations ended in mid- or late January.

OFF PACIFIC NORTHWEST (Washington and Oregon)

Soviet: During January, Soviet vessels were limited to exploratory fishing. Only 3 stern factory trawlers and 5 side trawlers were sighted. The only concentration of vessels was seen on January 31: 4 side trawlers off Oregon coast. Three were traveling northward; the fourth appeared to be fishing. In prior weeks, only one Soviet vessel was sighted during weekly surveillance patrols.

A medium freezer side trawler (SRTM-432) left Vladivostok late in November 1966 and arrived off the U. S. Pacific Northwest coast on December 17, 1966. On December 20, she was sighted by a BCF foreign fishing surveillance patrol 25 miles west of Umpqua Light (near Newport, Oreg.). The vessel was seeking Pacific saury concentrations off U.S. coast for exploitation by the Soviet fishing fleet. Newport is in the general area where the Soviet scientists found the densest concentrations of saury during their 1965 research cruise. Irregular and smaller saury concentrations were found between 41° and 48° N. latitude.

The "Akademik Berg," flagship of the Soviet Pacific fishery research fleet returned from her Bering Sea cruise to Vladivostok in early January 1967. The aim of the 3-month cruise was to study deep-water (up to 1,000 meters) trawling for Pacific halibut and sablefish.

Japanese: Two stern trawlers (probably doing exploratory fishing) worked off Pacific Northwest during January. Their greatest effort was off Washington but, at the end of January, one vessel was sighted off Oregon.

OFF CALIFORNIA

Soviet: Most of the 20 Soviet fishing and support vessels reported off California in December 1966 left. During January 1967, only a few vessels fished in that area.

On Jan. 4, 1967, the U. S. Coast Guard conducted a foreign fishing surveillance flight with a California Fish and Game Commission officer aboard. Six Soviet fishing and support vessels were sighted and identified (see table).

The 2 "Maiakovskii"-class stern trawlers built in 1966 are on maiden voyages. The "Ulianovsk" is the oldest stern trawler and the only "Pushkin"-class vessel operating in the Pacific (23 other Pushkins operate in the Atlantic). The "Fedor Krainov" is the 150th Maiakovskii-class stern factory trawler constructed by the USSR in her shipyards.

The base ship "Arman" was located at the entrance to Santa Barbara Channel, between Point Conception and the St. Miguel Island, about 120 miles northwest of Los Angeles. Two large stern trawlers were lying close to base ship; a third stern trawler was observed about 15 miles south of Point Conception--she was the only one of the 6 sighted believed fishing. The remaining 2 stern trawlers were within a few miles of the base ship.

No Soviet vessels were sighted during the next 10 days but, by mid-January, 1 stern trawler (BMRT) was sighted. By month's end, 3 BMRTs were spotted: 2 about 15 miles off Half Moon Bay, and 1 about 19 miles off Farallon Islands. One vessel reportedly had rockfish on deck.

IN NORTHWEST ATLANTIC

Soviet: For the second consecutive month, no Soviet vessels fished on Georges Bank and

Name	Type	Class	Gross Tonnage	Built (Year)
Arman	Base Ship	Severodvinsk	10,000	Poland (1961)
Ulianovsk	Stern factory trawler	Pushkin	3,000	W. Germany (1956)
Amursk	Stern trawler	Maiakovskii	3,200	USSR (1961)
Suifun	"	"	"	"
Fedor Krainov	"	"	"	(1966)
Boris Gorinskii	"	"	"	"

vicinity. During January 1966, about 50 fishing and support vessels were sighted there.

The best available information indicates that, during January, 30-40 vessels were concentrated on Grand Banks off Canada.

Late in January, U. S. fishermen reported several Soviet factory stern trawlers widely scattered south of Long Island, N. Y. (Hudson and Block Canyon), probably exploring.

There appears little doubt that the Soviets gradually will resume fishing in those areas.



DECLARE A DIVIDEND WITH SEAFOODS

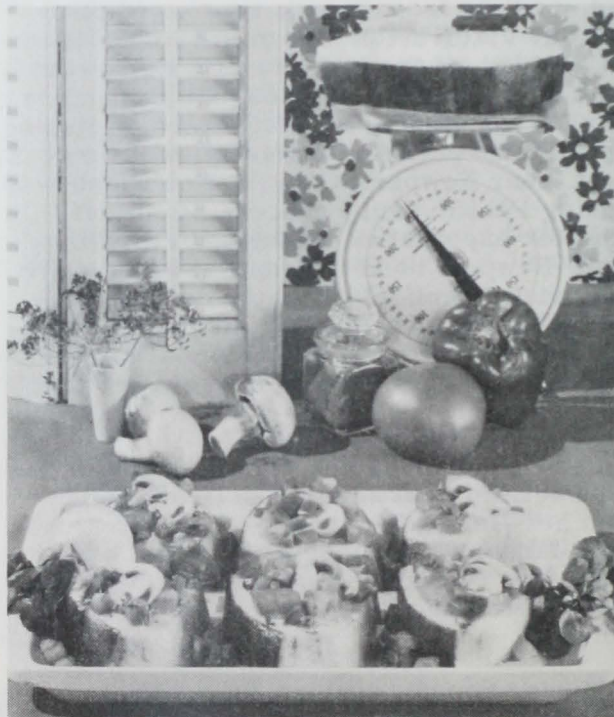
Fish and shellfish offer a netful of dividends for the dieter because they are low in calories, but high in protein, minerals, and vitamins so essential to good nutrition. Dieting is easy with seafoods; they have so much to offer--endless variety in color, flavor, and texture; quick to fix; and real eating enjoyment. Seafoods are good any day of the week for any meal of the day.

North Pacific halibut steaks are topped with mushrooms, garden-fresh tomatoes, green peppers, onions, and a dash of pimiento and parsley. Over this pour a blend of white wine, lemon juice, and dill before baking to a golden brown. This unusual seafood treat, Hearty Halibut, is a dill dandy. Only 230 calories per serving, too!

HEARTY HALIBUT

2 pounds halibut steaks or other fish steaks, fresh or frozen	$\frac{1}{2}$ cup dry white wine
$\frac{2}{3}$ cup thinly sliced onion	2 tablespoons lemon juice
$1\frac{1}{2}$ cups chopped fresh mushrooms	1 teaspoon salt
$\frac{1}{4}$ cup chopped tomato	
$\frac{1}{4}$ cup chopped green pepper	$\frac{1}{4}$ teaspoon dill weed
$\frac{1}{4}$ cup chopped parsley	$\frac{1}{8}$ teaspoon pepper
3 tablespoons chopped pimiento	Lemon wedges

Thaw frozen steaks. Cut into serving-size portions. Arrange onion in bottom of a greased baking dish, 12 x 8 x 2 inches. Place fish on top of onion. Combine remaining vegetables and spread over top of fish. Combine wine, lemon juice, and seasonings. Pour over vegetables. Bake in a moderate oven, 350° F., for 25 to 30 minutes or until fish flakes easily when tested with a fork. Serve with lemon wedges. Serves 6.



Hearty Halibut is from a new, 16-page, full-color, diet booklet just released by the United States Department of the Interior's Bureau of Commercial Fisheries. This publication, Seafood Slimmers, is available for 25¢ from the Superintendent of Documents, Washington, D. C. 20402.