International

INTER-AMERICAN TROPICAL TUNA COMMISSION

PANAMA ADHERES TO CONVENTION: Panama on September 21 deposited an instrument of adherence to the Inter-American Tropical Tuna Commission, an October 2 U. S. State Department release announced. Previously the participating countries were the United States and Costa Rica. The Convention for the Establishment of an Inter-American Tropical Tuna Commission was signed at Washington, D. C., May 31, 1949, by plenipotentiaries of the United States and Costa Rica.

By the terms of the Convention, the Commission is charged with the duty of gathering and interpreting factual information of the tuna and tuna-bait fishes of the tropical Eastern Pacific Ocean. The purpose is to maintain the populations of these fishes at levels which will permit maximum utilization year after year without depletion.

Starting on a small scale, the Tuna Commission has placed particular emphasis on two lines of research. With the cooperation of the U. S. tuna fleet it has collected both current and historical records of fishing activities. This information is basic to any fishery research. When analysis is completed it will provide some indication of the condition of the stocks. Further studies made from research vessels at sea will be necessary before the Commission can know whether regulatory measures are necessary.

The Commission has at the same time carried forward studies of the tuna-bait fishes in the Gulf of Nicoya off Costa Rica, formerly a principal source of bait fish supply for the tuna fleet. This research, conducted from Commission branch headquarters at Puntarenas, Costa Rica, definitely established the disappearance (for reasons not yet known) from the Gulf of the most important bait species, the anchoveta.

The Republic of Panama has made a gift of two boatloads of anchoveta which are now being taken from the Gulf of Panama to be transplanted in the Gulf of Nicoya in an effort to reestablish the species there.

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PANAMA LETS COSTA RICA TAKE TUNA BAIT FOR TRANSPLANTING: The Panamanian Government has granted permission to the Costa Rican Government to take from Panamanian jurisdictional waters a quantity of tuna bait (carnada de atun) for transplanting in Costa Rican waters, a September 21 U. S. Embassy dispatch from Panama states. The project will be under the direction of scientists from the Inter-American Tropical Tuna Commission, formed by virtue of an International Fishing Convention signed in Washington, D. C., in 1949 between Costa Rica and the United States.

The Panamanian Secretary of Commerce and Industry stated that the Costa Rican expedition will take two boatloads of tuna bait for transplanting to the Costa Rican Gulf of Nicoya. He stated further that the bait will be a gift. The vessel Saratoga, chartered for the purpose, was due to reach Panama on September 21.

Argentine Republic

JAPANESE FISHING VESSELS AND PROCESSING FACILITIES TO BE IMPORTED: The import of Japanese fishing boats and fish-processing facilities were reportedly being considered by an Argentine firm in negotiations with Japanese interests, a recent U. S. Embassy dispatch from Tokyo states. The plan recently publicized in the Japanese press (Nippon Keizai, July 15) provides for:

1. Establishment of a base of operation in Argentina.

2. Construction in Japan of: 2 fish carriers of 500 gross tons each, 10 trawlers of 100 gross tons each, and 5 trawlers of 60 gross tons each.

3. Fish-freezing and fish-meal manufacturing facilities.

4. Use of some Japanese fishermen and technicians for fishing and plant operations.

UNLOADING AND PACKING FISH AT WHARF IN MAR DEL PLATA, ARGENTINA.

5. A 5-year period for development of this commercial fishing enterprise with Japanese assistance.

Prior to World War II, a Japanese firm established a branch company in Buenos Aires. Two Japanese trawlers (average 450 gross tons) with Japanese crews operated under the Argentine flag from 1936 to 1949. Fishing was in the offshore approaches to the Bay of LaPlata. The bulk of the catch was hake, but also included croakers, squid, and prawns.

Burma

BURMESE-JAPANESE FIRMS PLAN JOINT FISHING ENTERPRISE OFF BURMA: A large Tokyo fishing company is reported to have recently agreed to a plan with a Burmese firm for the establishment of a joint fishery enterprise, reports a recent U. S. Embassy dispatch from Tokyo. The plan as published in the Japanese press (Nippon Keizai, July 25, and Yomiuri, August 13) provides for:

1. Capital investment: 60 percent Burmese, 40 percent Japanese.

2. Base of operations at Rangoon.

3. Deep-sea fishing by trawling in the Gulf of Martaban.

4. Charter of the Japanese company's otter trawler, Tenyo Maru No. 11 (276 gross tons).

5. Twenty fishing trips per year with an expected catch of 3,700,000 pounds annually.

6. Catch to be marketed chiefly in Burma, but with some export possibly to Japan and the United States.

7. Expansion of fishing when conditions permit by an additional 3 otter trawlers and 3 pairs of bull trawlers to be purchased from Japan.

8. The Japanese firm in addition to providing its share of the capital will supply necessary fishing materials for which payment will be paid later by the new company.

9. The new company was to be established by October 1, 1953.

In 1938 the Japanese conducted some reconnaissance trawling in the Bay of Bengal, including exploration along the coast of Burma. Some fish caught by this expedition was frozen and part of it sold at Rangoon and Calcutta.

Canada

BRITISH COLUMBIA SALMON PACK UP: The salmon pack in British Columbia as of October 3, 1953, totaled 1,690,343 cases (48 1-lb. cans) as compared with 1,258,084 cases for the corresponding period of 1952, reports a September 15 U. S. consular dispatch from Vancouver. The remarkable feature about this year's pack has been the large proportion of sockeye caught in the Fraser River which is attributed to the efficacy and value of the fishways at Hell's Gate and efficient planning of the fishery's restoration. The sockeye pack is slightly over 509,000 cases, but from a marketing standpoint packers would probably have been as well satisfied with 150,000 fewer cases of sockeye and a corresponding increase in the pack of pink salmon.

It is hoped that as a result of the carefully planned advertising campaign the domestic market will absorb two-thirds of the pack.

Colombia

NAVY TO CONTROL OCEAN FISHING: The Colombian Government by Decree No. 2269 of August 31, 1953, transferred control over ocean fishing from the Ministry of Agriculture to the National Navy, reports a September 18 United States Embassy dispatch from Bogota.

The control of ocean fishing, including the issuance of ocean-fishing licenses, will henceforth be the responsibility of the Colombian Navy. It may impose temporary or permanent prohibitions, limit the number of vessels engaged in the industry, and specify the fishing periods, methods, and equipment that may be used.

The officers charged with the carrying out of the provisions of the subject decree in Colombian ports will be named by the Ministry of War from the active personnel of the Colombian Navy.

Biological studies of maritime fauna will be carried on by the Ministry of Agriculture.

There has been considerable newspaper comment regarding alleged illegal fishing in Colombian territorial waters by foreign vessels. Placing the control of ocean fishing under the Colombian Navy is designed to insure better enforcement of

the fishing regulations. The effect on fishing in Colombian waters by non-Colombian entities cannot be determined definitely until the Navy has issued its regulations. It is believed that a more determined effort will be made henceforth to control alleged illegal foreign fishing in Colombian territorial waters.

Formosa (Nationalist China)

FISHERIES STATUS: The Formosan fisheries production goal for 1953 was announced by the Ministry of Economic Affairs to have been set at 140,250 metric tons as compared with the 1952 catch of 121,697 tons (see table), reports a July 20 U.S. Embassy dispatch from Taipei, Taiwan.

Formosa's Fisheries: Production Goal For 1953 and Catch For 1952

Type of Fisheries	1953 Goal	1952 Catch
	Metric Tons	Metric Tons
Deep sea	32,000	18,515
Inshore	35,800	29,696
Coastal	42,300	43,966
Fish culture	30,150	29,580
Total	140,250	121,697

With a view to attaining the 1953 goal, which is about 15 percent higher than the 1952 catch, the following measures were announced to boost production:

1. Fishermen's insurance against injury, disability, death, and old age was introduced on March 1, following the promulgation by the Provincial Government of the "Fishermen's Insurance Measures" on February 28.

2. A "fishing boats for fishermen" program was mapped out by the Provincial Government to build 87 small motorized fishing boats—50 of 5 tons, 32 of 10 tons, and 5 of 15 tons to be sold to groups of fishermen who may pay for the boats in 18 monthly installments starting from the third month after delivery. Each 5-ton boat is to be sold to a group of 4 or more fishermen, each 10-ton boat to a group of 6 or more, and each 15-ton boat to a group of 8 or more. To finance this program the Government earmarked a loan of NT$1.9 million (US$184,000) and CUSA has taken steps to appropriate a loan of NT$4 million (US$388,000) and US$100,000 to be spent on importing Diesel engines for the boats. Construction of the boats had already been started, and delivery to fishermen was scheduled for August.

3. Various programs were announced to extend financial assistance for improving or developing facilities of the fishing industry. A NT$4-million (US$388,000) loan was granted for repairing fishing boats; US$200,000 for purchasing fishing equipment: NT$5 million (US$485,000) distributed to local governments as subsidy for rehabilitating fishing ports. Other programs planned for include US$1.5 million in loans and subsidies for developing deep-sea fishery, NT$7 million (US$680,000) for purchasing small motor fishing boats, and for improving cold-storage facilities and expanding experimental and inspection facilities.

The Chinese Government was considering the advisability of reviving the whaling industry in Formosa. The Government inquired into the prospects for admission into the International Whaling Association, which will qualify Nationalist China for procuring whaling ships and equipment from member countries. A favorable reply was received from the IWA in mid-March. However, no further development has been announced.

On March 25 the Executive Yuan approved a proposed contract between a Japanese fishing firm and the Fisheries Administration of the Ministry of Economic Affairs

and two other Government fisheries concerns for technical cooperation in mackerel fishing. This contract, signed April 1, marked the first postwar Sino-Japanese fisheries cooperation whereby two Japanese fishing vessels will operate in the Suso area and at the same time train Chinese technicians in mackerel fishing techniques and thus contribute to developing Formosa's inshore fisheries.

France

SALT COD FISHERY FACING CRISIS: French Grand Banks trawlers fishing for cod fail to clear their operating costs in some cases, according to a recent article in Le Marin, a French trade newspaper. The article points out the existence of a crisis in the salt cod trade that but for the outbreak of the Korean War in 1950 would have become apparent 3 years earlier. Regulation of this fishery has been proposed. It has been suggested that fishing operations should be discontinued on November 1, 1953, until February 15, 1954.

MODERN FRENCH STEEL TRAWLER AT BOULOGNE-SUR-MER.

Another article in the same newspaper notes that there is a marketing crisis in the salt cod industry, occasioned at least in part by the small size of the fish now being landed by the distant-water trawlers, and also by the trend away from salt fish in consumer preference. It was believed that freezing fish at sea would be the salvation of the distant-water fleets that comprise only some 40 vessels and are threatened with further reduction. Two vessel owners are reported to plan the construction of one freezer-trawler each.

Greece

VESSEL TRAWLS AT 380-FATHOM DEPTH: The Greek trawler Nautilus recently returned to port with a catch of about 800 pounds of cod trawled from a depth of 380 fathoms, according to the July 1953 Aleia, a Greek trade magazine. Where the boat fished was not reported.

India

TUNA FISHERY IN SOUTHWEST AREA: Tuna occurs along the Southwest coast of India between Colachel in the south and Quilon in the north, reports a July 16 U. S. consular dispatch from Madras. The commercial catch of tuna in this area consists of the Euthynnus species according to the State Government of Travancore-Cochin. The Euthynnus occurs in two different seasons during the year; from March to May and from October to December. Vital statistics of this species are as follows:

Species	Length			Average weight
	Minimum	Maximum	Average	
	Cm.	Cm.	Cm.	Lbs.
Euthynnus	30	66	57	6

There are no authentic data on the quantities of tuna landed. The landings, however, during this season were approximately 74 metric tons of Euthynnus. The present landings cannot insure a steady supply to feed a canning plant. There are no facilities for freezing fish.

Indonesia

ECA-SUPPLIED FISHING VESSELS OPERATE WELL: An investigation on the end-use of fishing vessels supplied to Indonesia by the Economic Cooperation Administration (now Mutual Security Agency) revealed that all vessels inspected showed very satisfactory operating records, according to a June 27 U. S. Embassy dispatch from Djakarta. These vessels have increased catches and improved the welfare of the operators.

The Indonesian Seafisheries Service distributed the vessels over a wide area, primarily for their value in stimulating, via actual demonstration, a broad interest in motorization. This was carried out at considerable expense to the Indonesian Government. However, the actual demonstration of the efficiency of motorized vessels, which was the goal sought, has been achieved, plus an appreciable increase in the food supply.

The quality of the Indonesian teakwood vessels has stimulated the local industry to the point where no further importation of vessels is contemplated or necessary.

Motorized fishing vessels' captains and crews invariably reported five to ten times their former earnings. This has stimulated the Indonesian fisheries toward rapid motorization. Also, this means that in the near future the total catch of fish will be raised by a proportionate figure.

Although some of the ECA-financed fishing vessels are still being operated by the Seafisheries Institute, plans are being effected at the present time to turn all the vessels over to the cooperatives. The delay has been due to the necessity for training crews and building up the shore installations for marketing the fish in the areas where they will operate.

The 75 fishing craft covered in this report contributed from November 1951 to January 1953 a total of 1,767,755 kilograms of fish with a landed value of 3,710,937 rupiah (3,889,000 lbs. valued at US$315,000). Considering that 37 of these boats (30 majang, 7 bonito) were relatively non-productive during 1952, the Seafisheries Service is predicting a substantial increase for 1953.

In addition, during 1952 somewhere in the neighborhood of 50 locally-built boats with ECA motors in them had been distributed and were fishing.

The two tuna clippers supplied by ECA in 1952 were visited by those conducting the survey. The Seni Leba was stationed at Bali, where it planned to exploit the waters of the Lesser Sundas in search of bait fish and yellowfin tuna. The Seni Rosi was stationed at Air Tembaga, where recently new copper sheathing was installed and the engines overhauled. This vessel is scheduled to be stationed at Makassar in 1953 and to be joined there later by the Seni Leba. At the time of the reporter's visit to the Seni Leba, the training of the Indonesian engineers was about 70 percent complete and the training of the fishermen about 50 percent complete. On the Seni Rosi, due to the fact that there is no fishing instructor assigned to the boat and

the fact that the contract engineer had left the boat in November, the training of the engineers was 40 percent complete and that of the fishermen less than 15 percent. Very recently an engineer-instructor was placed under contract and assigned to the Seni Rosi and a fishing instructor is now being recruited.

The bonito fisheries in Ambon have a remarkably high production compared with that of Air Tembaga. The fishermen in this port, according to the Chief of the Sea-fisheries Service Station and as indicated by the catch records, are averaging about 16 rupiah (US$1.36) per day, which is more than twice as much as it is possible to earn on sailing prehus. This is the only port where the practice is followed of giving the fishermen free fish in addition to their shares. This is probably due to the abundance of bonito. On catches up to 200 fish, each fisherman is entitled to take one fish. When the catch is over 200 fish but less than 500, each man is given two fish, and when the catch runs greater than 500 each man is entitled to a maximum of four fish to take home.

Japan

CANNED TUNA EXPORT PRICES RISE AGAIN: The latest prices for Japanese canned tuna for export to the United States were announced on August 28 by the Tokyo Canned Tuna Sales Company, the principal source of supply for Japanese exporters to the United States market, a September 24 U. S. Embassy dispatch from Tokyo reports. The latest previous increases were announced on August 12. The new prices as compared with the old are:

Japanese Canned Tuna Export Prices (Announced on August 28, 1953)

Item	Case & Can Size	New Prices 1/		Old Prices 1/	
		In brine	In oil	In brine	In oil
		US$ Per Case	US$ Per Case	US$ Per Case	US$ Per Case
White meat tuna (albacore), solid pack...	48/3½-oz.	5.95	6.05	5.85	5.95
"	48/7-oz.	10.00	10.10	9.90	10.00
"	24/13-oz.	9.15	9.25	9.00	9.10
"	6/2-kg.	10.80	10.90	10.50	10.60
(albacore), flakes....	48/6½-oz.	8.00	8.10	7.90	8.00
Light meat tuna (skipjack, yellowfin, or other tunas) Solid pack..	48/3½-oz.	5.45	5.55	5.35	5.45
"	48/7-oz.	8.90	9.00	8.60	8.70
"	24/13-oz.	8.25	8.35	7.85	7.95
"	6/2-kg.	9.70	9.80	9.25	9.35
" flakes....	48/6½-oz.	7.10	7.20	6.90	7.00

1/ INCLUDE 2-PERCENT COMMISSION FOR EXPORTERS.

As of September 9 the demand for canned tuna in United States markets was reported brisk. Japanese exports to these markets were reported to be 150,000 cases (48/7-oz. cans). The Tokyo Canned Tuna Sales Company up to September 9 received 1,180,000 cases of tuna from the packers (presumably since January 1953) and had sold 970,000 cases to exporters. As of August 31 a total of 760,444 cases have been reportedly licensed for export.

Exports for the period April-August 1953 were announced as 28,679 tons licensed, of which 28,673 tons have been actually loaded aboard ships.

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EXPORTS OF FISHERY PRODUCTS, JANUARY-JUNE 1953: Japanese exports of fish and marine products to all countries for the first six months of 1953 reached 57,245 metric tons (126,202,000 lbs.) and an estimated export value of US$27,797,000 (4.6

Table 1 - Japanese Exports of Canned Tuna (Solid Pack) November 1952-May 1953

Month	White meat in brine		White meat in oil		Light meat in brine		Light meat in oil	
	United States	Other Countries	United States	Other Countries	United States	Other Countries	United States	Other Countries
	(In standard cases (48/7-oz. cans each)							
1952:								
November	31,611	409	8,950	6,338	26,382	-	-	5,490
December	43,983	1,386	12,436	5,219	998	-	-	5,998
1953:								
January	71,959	-	27,472	-	6,099	-	-	-
February	101,404	314	53,902	17,105	8,759	964	-	6,139
March	88,481	72	17,138	4,157	6,874	-	-	4,120
April 1/	28,541	2/	3,203	2/	3,377	2/	-	2/
May	84,170	2/	4,130	2/	13,532	2/	39	2/

1/INCLUDES 3,219 CASES WHICH WERE NOT DEFINITELY CLASSIFIED AS WHITE-MEAT TUNA.
2/NOT AVAILABLE.

percent of the total value of all exports). The major portion of the fishery products exported were fresh and frozen and canned tuna to the United States, reports a recent U. S. Embassy dispatch from Tokyo.

Japanese exports of fresh, frozen, and canned tuna, canned crab meat, and other canned fish to the United States in the first 6 months of 1953 amounted to 73,351,000 pounds with an export value of US$22,522,000. The leading item was fro-

Table 2 - Japanese Exports of Canned Tuna to United States

Month	1953	1952
	Actual Cases	Actual Cases
January	69,530	65,408
February	142,121	68,148
March	86,223	78,942
April	54,890	66,583
May	69,445	56,215
June	172,764	41,902
Total	594,973	377,198

Table 3 - Japanese Exports of Canned Tuna (Solid Pack) by Can and Case Size to United States 1/

Case and Can Size	January-June 1953	January-June 1952
	Actual Cases	Actual Cases
48 3½ oz.	6,190	1,000
48 7 oz.	450,327	286,097
24 13 oz.	36,716	33,238
6 4.4 lbs.	101,152	56,863
Total	594,973	377,198

1/NO RECORD AVAILABLE OF EXPORTS OF FLAKES PACK PUT UP IN 6½-OZ. CANS, 48 TO THE CASE.

zen tuna--50,078,000 pounds (estimated export value US$9,014,000); followed by canned tuna 9,855,000 pounds (value US$3,453,000), canned crab meat 1,411,000 pounds (value US$3,586,000), and other canned fish 14,819,000 pounds (value US$6,975,000).

Table 4 - Japanese Exports of Frozen Tuna, January-June 1953 and 1952

Month	1953		1952	
	United States	Other countries	United States	Other countries
	(Short Tons)			
January	398	150	2,831	35
February	2,958	175	1,361	-
March	3,856	-	2,208	-
April	3,167	-	1,100	-
May	2,358	50	1,301	-
June	12,302	-	6,590	300
Total	25,039	375	15,391	335

In addition, 6,216,000 pounds (value US$2,516,000) of fish and marine animal oils were exported to the United States during the same period.

Table 1 gives the Japanese exports of canned tuna to all countries by type of pack for November 1952-May 1953 in standard cases; table 2 gives the Japanese exports of canned tuna to the United States in actual cases for January-June 1952 and and 1953; table 3 gives the Japanese exports of canned tuna by can and case size in actual cases for January-June 1952 and 1953. Table 4 shows the Japanese exports of frozen tuna for January-June 1953 and 1952.

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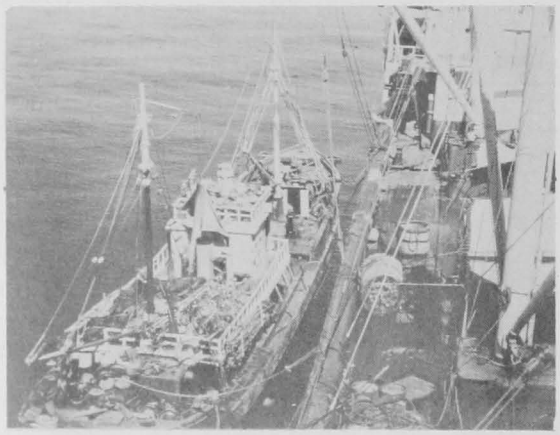
TUNA MOTHERSHIP EXPEDITIONS: "Tenyo Maru" Expedition: The tuna expedition headed by the mothership Tenyo Maru as of September 1 reported its catch as 12,488,500 pounds, exceeding its goal of 12,405,000 pounds, reports a September 24 U. S. Embassy dispatch from Tokyo. The catch consisted of: yellowfin tuna 6,827,082 pounds, other tunas 1,370,819 pounds, swordfish 2,312,912 pounds, shark 1,957,211 pounds, and other species 20,476 pounds. Operations ended on September 4 and the Tenyo Maru arrived in Tokyo on September 14.



A JAPANESE TUNA CATCHER BOAT TIED UP TO A MOTHERSHIP.

This expedition operated with one mothership (11,224 gross tons), 30 catcher boats (average 130 gross tons), and 2 carriers (1,000 gross tons). Operations were originally scheduled to end in mid-September.

"Tone Maru" Expedition: A smaller tuna expedition operated in the Gilbert Islands region. It consisted of the modified otter trawler Tone Maru (535 gross tons), working with the regular tuna-type boat the Kashima Maru (99 gross tons). Fishing began mid-July and ended August 12. A preliminary report indicates a total catch of 349,581 pounds: The catch consisted of yellowfin tuna fillets for export, 156,300 pounds; yellowfin tuna for domestic market, 38,125 pounds; big-eyed tuna, 32,038 pounds; swordfish, 85,966 pounds; shark, 17,384 pounds; flake meat, 19,228 pounds; other species, 538 pounds.

"Saipan" Expedition: The tuna fleet led by the mothership Saipan (3,000 gross tons) was operating in the region of the Gilbert Islands. This fleet began fishing in early August with 6 small deck-loaded catchers (average 12 gross tons) and 7 larger catchers (100 gross-ton class). The catch is reported equal to production estimates at the time the fleet was organized.

As of mid-September the catch amounted to approximately 1,406,000 pounds of which 827,000 pounds was yellowfin tuna, 82,700 pounds albacore, and the remainder other tunas and sharks. A small Japanese carrier was scheduled to rendezvous with the Saipan to transfer the catch from the mothership for transport to Japan. The Saipan and her catchers were scheduled to continue fishing until the middle of October, and were to return to Japan in early November. Much of the fish is earmarked for export as frozen tuna. The Saipan, purchased from a United States firm earlier in the year, is on its first Japanese tuna operation.

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SHRIMP FISHING OFF CENTRAL AMERICA: A large Japanese firm has reportedly completed arrangements to engage in shrimp fishing along the Pacific Coast of Central America, reports a recent U. S. Embassy dispatch from Tokyo. Operations will be based at Puntarenas, Costa Rica, and are expected to begin in early October. The Japanese firm has entered into an agreement with a refrigeration company in Costa Rica. The agreement provides for fishing rights over a two-year period and the use of facilities at Puntarenas.

Two Japanese trawlers, the Tokai Maru No. 13 and Tokai Maru No. 15 (averaging 98 gross tons each), were scheduled to sail from Japan about the middle of August, arriving at Costa Rica about the end of September. Shrimp fishing will be during the seasonal period, October-March; trawling for bottom fish will be carried on after the shrimp season. An annual catch of at least 250 tons of shrimp is anticipated. The catch will be exported to the United States through the Costa Rican refrigeration company.

Prior to World War II, Japanese-owned trawlers operated from bases in Mexico in the Gulf of California and in the Gulf of Mexico. The catch was principally shrimp, some of which was frozen and shipped to Japan; some was sold in the U. S. markets. These operations, which began in 1935 and extended until 1941, were in part exploratory. Six trawlers were engaged from 1939 to 1941. The records show that a little exploratory fishing was done off Costa Rica in the prewar years, but not from land bases in that country.

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FISHERIES LAW AMENDED: The Fisheries Law, which provides for the establishment of a fundamental system for the administration, development, and democratization of the Japanese fisheries, was amended on July 28, 1953. The original law was passed by the Diet in November 1949, reports an August 27 U. S. Embassy dispatch from Tokyo. The amendment deletes that part of the law requiring the payment of fishing right fees or license fees.

The amendment is especially significant because it eliminates the Government's means to collect funds from the fishermen to cover the cost of payments by the Government in compensation for fishing rights to former holders of these rights. Cancellation and redistribution of these rights was the principal feature of the Fisheries Law. The Government has already paid to former right holders approximately 18.5 billion yen (US$51,000,000). Payment of right and license fees was begun in 1952. The Government expected to collect 605,000,000 yen (US$1,700,000) in that year. Continued annual payments were planned over a 25-year period. As of May 1, 1953, only 38 percent of the 1952 amount had been collected. The fishermen and other operators have stalled or otherwise been delinquent in their payments. Now that the law has been amended there is little hope of collecting the balance due.

Consideration is being given to reestablishing local fishery taxes, a system in effect prior to the Fisheries Law. The rates of such local taxes have not been determined as yet nor has appropriate legislation been drafted for reestablishing this system. A system of local taxes would represent a marked difference in fishing costs as compared to the rights and license fees which are now abolished.

Malaya

SHRIMP FISHING: Nearly all the coastal dwellers in Malaya are fishermen, and many specialize in shrimp fishing, according to the September 1953 World Fishing, a British Trade magazine. The shrimp season is about 8 months long and during this time the fishermen go out at each change of the tide to the grounds a few miles offshore. Just before high tide, the crew of two or three get into their boat, specially imported from China, and fit the outboard motor. These motors are in common use. The boat leaves the village at the mouth of the river and sails to the sea, and after half an hour's run it reaches the bobbing poles which act both as floats and markers for the nets.

These nets are funnel-shaped, and with the motion of the sea, the shrimp flow along into a sack at the small end. This sack is brought to the surface, the end is untied, and into a wicker creel spill perhaps 30 or 40 pounds of assorted fish. The little fish and the sea snake, the octopus and the jellyfish are removed, and the rest, mainly shrimp, are emptied into the boat. The net is then turned to catch the ebb tide, and the boat moves on to the next net, there being six or seven nets in each ground.

The catch is then taken back to the village where any remaining odds and ends, such as small crabs and eels, are picked out. The shrimp are boiled for 5 to 10 minutes and then spread out in the sun to dry. Next day they are put in a bag and beaten to separate the shells, which make excellent fertilizer. Nothing is wasted.

The shrimp bring an average of 2s. 6d. (35 U.S. cents) per pound and a good catch may weigh 550 to 675 pounds though it is generally nearer 100 to 150 pounds. Overhead, of course, is high; the boats and nets come from China, and every other week the nets have to be taken up and mended and dried. They are proofed against rot by boiling in an infusion of mangrove bark. At the end of the week shrimp fishing starts again. Four times a day, at each turn of the tide, the Chinese and Malay fishermen go out after shrimp.

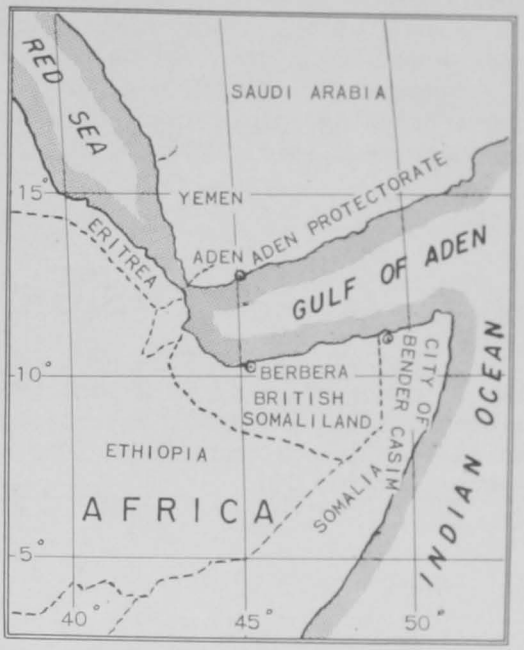
Norway

MEAL PLANTS INSTALL EQUIPMENT FOR FISH SOLUBLES: A Norwegian company which specializes in equipment for making fish solubles from stickwater has announced that 15 units are being installed in Norwegian fish-meal plants. In addition, the company reports that orders for two complete units have been received from South Africa, reports the Norwegian Information Service in a September 24 release.

Somalia

FAO TEAM DEMONSTRATES TUNA FISHING METHODS: A team of Food and Agriculture Organization (FAO) experts in May 1953 demonstrated bait fishing for tuna in the Gulf of Aden with the use of a California tuna vessel--New Hope, reports an August bulletin from that agency. The vessel, chartered by FAO, was equipped with radio, direction finder, photoelectric pilot, Diesel engine, refrigeration, bait tank, and facilities for several kinds of fishing.

The operation of the vessel was part of a survey by FAO experts to develop Somalia's fishery resources and production in the Gulf of Aden. The survey revealed that only the fringe of a large tuna population was being exploited by fishermen from Somalia.



Already one cannery in Somalia has asked for guidance in installing a bait tank on one of its vessels next season, and there is little doubt that the New Hope's successful bait-catching technique will be emulated all along the coast.

At some times, when the tuna are feeding near the surface, trolling is an important means of taking them. FAO demonstrated the technique of multiple trolling, by which, with the help of long "tangon" poles, seven or more lines may be used at a time. Rigged with this gear, the New Hope caught in one day ten times as much tuna as the whole fishing fleet of Bender Cassim. The small local dugout canoes can also use multiple trolling if they are fitted with outriggers to make them more stable. To demonstrate this, one of the local craft was fitted with an outrigger float. This craft aroused keen interest, and some of the canneries intend to construct similar ones for their fishermen so they can troll with seven lines next season.

Somalia wants FAO experts to return for the 1953/54 season, when the chances are that the yellowfin tuna, very scarce this season, will reappear in quantity. It is hoped that the use of multiple trolling, live bait, long line, and the adaptation and mechanization of fishing craft will result in a sizable pack.

Spain

MORE FISH CANNERIES ESTABLISHED: The opening of a fish canning factory at Malaga by a Vigo firm and the establishment in the near future of five more factories at the same place by Vigo firms and an El Grove firm, the press reported on September 6. This is attributed to favorable sardine runs in the Mediterranean. Sardines have been successfully trucked from Malaga to Vigo by several Galician factories.

UNLOADING SARDINES FROM THE HOLD OF A SPANISH SARDINE AUXILIARY CRAFT.

August was a much better month for the fish canning industry than the same month a year ago, reports a September 18 U. S. consular dispatch from Vigo. Production, however, was less than the potential due to uncertainty among the canners because the Government did not act on the industry's appeals for a more favorable export exchange rate.

CRISIS IN THE FISHING INDUSTRY: The Spanish fishing industry can be saved from its "worsening" crisis only by direct and immediate action of the Government, according to press reports. The principal causes of this crisis have been the disappearance of sardine runs from the Galician littoral (this species is basic to the economy of the short-range fishing fleet and to the fish canning industry); ever-increasing distances to the fishing grounds of the long-range fleet; the need of modernizing the fleet in general; increased operating costs; the lack of enforcement of fishing regulations and the need of revising such regulations; and the need of a more realistic export exchange rate and other aids to the canning industry.

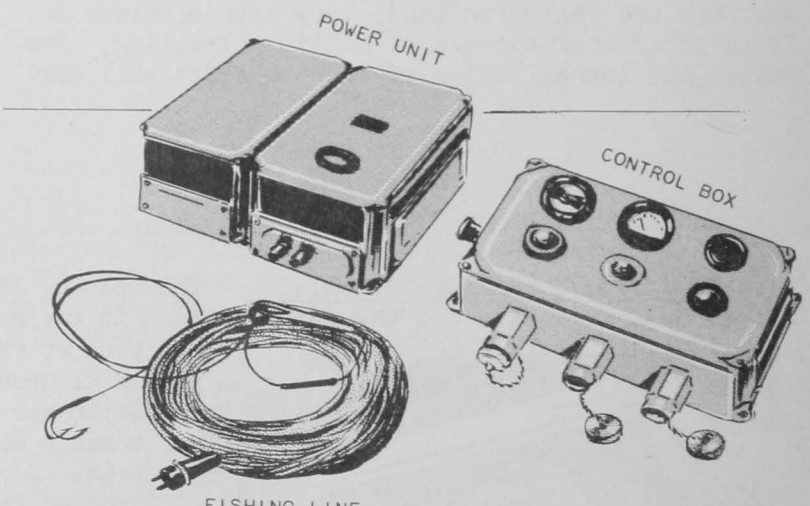
Spanish Morocco

CANNED AND SALTED FISH PRODUCTION, 1952: The total Spanish Moroccan production of canned fish in 1952 amounted to 3,700 metric tons, valued at 70 million pesetas (US$1.8 million), reports a June 22 U. S. Legation dispatch from Tangier. The salted fish production in 1952 totaled 3,300 metric tons, valued at 3 million pesetas (US$76,000).

NOTE: VALUES CONVERTED ON THE BASIS OF 39.65 PESETAS EQUAL US$1.

Sweden

EXPORT OF ELECTRICAL TUNA-FISHING UNITS PLANNED: A Goteborg manufacturer has signed a contract with the German inventor of the "tuna shock," an electrical tuna-fishing device. The Swedish manufacturer will make about 200 units each year, mostly for export, an August 31 U. S. consular dispatch from Goteborg reports. This season only 30 units have been produced, and one was for export to Denmark. Peruvian interests are also considering the "tuna shock" for swordfish fishing.



THE SWEDISH "TUNA SHOCK" ELECTRIC UNIT.

About ten Swedish fishing vessels have now tried the electric fishing method and the crew members seem to be very satisfied.

The fishing vessel Skantic of Ockero arrived in Goteborg recently with 24 tuna caught with the "tuna shock." Twenty of these were caught in one day, and the largest one weighed 575 pounds.

"It is fun to fish with electricity and the risks are not so great," the Skantic crew members stated. "We had a few bouncers which got away and one woke up

after the shock when it was on the deck. That was before we had time to kill it. The tuna flapped about wildly and made a hole in the planking with its jaws."

The electric "tuna shock" unit does not occupy much room. It consists of one converter; one maneuvering box connected with three cables to as many lines and special hooks. Three lines can be fished at the same time. The lines have floats in different colors and when one of the floats disappears indicating a bite, the electric current, which renders the fish unconscious, is connected by pressing the contact button in the maneuvering box. The current from the vessel's 24-volt battery is converted so that about 200 volts goes out to the hook when the fish bites. That makes 80 to 90 amperes in the top shocks. A series of shocks of 4 to 5 seconds are enough to make the fish unconscious. After that it is pulled in and lifted aboard with the winch.

To prevent any members of the crew from receiving shocks, there is a locking device. The hook must be in the water otherwise the electric current has no effect. It is not necessary to use a very heavy hook, thus improving the fishing possibilities, as tuna are very shy.

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FILLET PRODUCTION, 1952: Swedish production of fish fillets in 1952 amounted to 6,000 metric tons, reports an August 14 U. S. Embassy dispatch from Goteborg. Of this total, 5,800 tons were cod and haddock, and 200 tons flounder fillets.

FILLET EXPORTS, 1949-51: Swedish exports of fish fillets in 1951 totaled 275 metric tons as compared to 690 tons in 1950 and 1,025 tons in 1949. There was no appreciable amount of fish fillets exported to the United States during these years.

United Kingdom

NEW METHODS DEVELOPED FOR QUICK-FREEZING FISH AT SEA: New methods of quick-freezing fish at sea developed by the Torry Research Station, Aberdeen, Scotland, are to be tested on a distant-water commercial trawler, reports the September 1953 World Fishing, a British trade magazine. The equipment has already been tried on the Government's research vessel, and arrangements are being discussed with the White Fish Authority and the distant-water industry to equip a suitable commercial vessel with the type of equipment tried out on the Government research vessel.

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COD-FISHING TRAWLERS USING LARGER-MESH NETS IN BARENTS SEA: Most of the British trawlers fishing for cod on the Bear Island grounds in the Barents Sea are now using a larger-mesh net to prevent these prolific fishing grounds from being "fished out," reports the August 22 Fish Trades Gazette, a British trade magazine. Catches at Bear Island have not been as heavy as they were some years ago and with the increasing number of vessels fishing there is good reason for apprehension about the future.

It will be remembered what happened to the North Sea, once thought to have inexhaustible supplies of fish, which was quickly depleted by overfishing in spite of the fallow periods of two world wars.

In view of these fears, the experiments which have been carried out by Northern Trawlers, Ltd., of Grimsby, in the use of a trawl of larger mesh than the normal, is

of particular interest, as the bigger mesh enables the smaller fish to get away and so has a material value in the conservation of small fish.

A representative of Northern Trawlers, Ltd., said he had read of careful experiments in the same direction which had been made in the United States and considering it to be sound common sense decided to try the idea of a bigger mesh. "At first, our skippers were dead against it," he said. "They said it had been tried and had not been a success, but I decided to try it for myself."

The new net has a mesh of 5-3/8 inches, over an inch more than the regulation mesh of 4-5/16 inches.

The first big mesh nets were enclosed in a bag of old herring net and soon proved that the small fish were getting through the larger mesh. In effect, the bigger mesh graded the fish automatically, retaining in the trawl a higher proportion of marketable fish. With the older gear, up to two-thirds of every catch was of undersized fish which had to be sorted out and thrown overboard—most of them dead.

The experiments have proved so successful that most of the ships of the northern fleet are now equipped with the new nets for the Bear Island grounds.

The new nets are useful only for Bear Island, said the Northern Trawlers' representative. "There we are out for cod and the bigger mesh is valuable. We may go in for even bigger mesh nets yet."

With the new trawls retaining less fish than the older ones of smaller mesh, it has been found that the nets can be towed longer between hauls and there is much less labor for crews in sorting out the catch.

The catches of the vessels fitted with the new trawls had certainly not diminished, and they were landing a larger and more uniform size of fish.

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BRITISH-FRENCH SHRIMP FISHING DISPUTE: Harwich (England) shrimp fishermen allege that French shrimp boats have "invaded" their traditional grounds, 7 miles from Harwich, according to the September 1953 World Fishing, a British fishery magazine. As their grounds are, of course, outside territorial limits, it is believed that no steps can be taken to stop the French encroaching, but feeling is high because the Harwich fishermen say the grounds have always been theirs and the catches are now much smaller as a consequence of the French depredations. The French vessels are said to be faster and more modern than their English counterparts.

Precautions have been taken to insure that the French catches are not landed in Essex, England, to be sold in competition with the local fishermen.

Venezuela

FISHERIES REVIEW, 1952: The total catch of the Venezuelan commercial fishing industry in 1952 amounted to 50,564 metric tons, approximately the same as in 1951, reports the September 26 Foreign Trade, a Canadian Government publication.

The import duties on canned sardines and salmon were raised to 28 cents per gross pound through the United States-Venezuelan Trade Agreement of August 1952.

This action reduced Venezuelan imports of canned sardines to one-third of their former level, thus aiding the national sardine industry. Imports of canned salmon

BOAT FOR TRANSPORTING SARDINES, CUMANA, VENEZUELA.

in 1952 amounted to 383,000 pounds, continuing at the same rate as in previous years. Cod imports, which also pay a 28-cents-per-pound duty, totaled 1,060,000 pounds as compared with 1,014,000 pounds in 1951.

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FISH BUYERS SEEK FIXED PRICES: Fish buy-boat operators have called a meeting to ask the Venezuelan Government to fix fish prices, reports an August 21 U. S. Embassy dispatch from Caracas. These buy-boat operators claim that on the average 50 metric tons of fish arrive at the port of La Guaira each week. The fish are packed in ice but it is claimed that at times cargoes are held for as long as ten days before the fish are sold.

There are reported to be 150 boats engaged in buying fish from the fishermen and competition has eliminated profits, and in many cases there are losses.

The operators ask a stable price which will produce neither an excess nor a scarcity but one fixed to insure a profit to the boat owners and a fair price to consumers.