



International

SOUTH AMERICAN COUNTRIES DISCUSS SOUTH PACIFIC FISHERY PROBLEMS

The Colombian official press bureau issued a statement by the Secretary General of the Foreign Office on September 20, 1954, to the effect that the Government of Chile has invited representatives of the governments of Peru and Ecuador to attend a meeting in Santiago, Chile, in October to study the problem of the exploitation and conservation of the maritime resources of the South Pacific, states a U. S. Embassy dispatch (September 22) from Bogota. The statement added that as Colombia had indicated an interest in the subjects to be discussed at the Santiago meeting, the diplomatic representatives in Bogota of the Chilean, Peruvian, and Ecuadorian governments had called upon the Colombian Foreign Minister. During this visit, it had been stated to the Foreign Minister that the three other governments would view with special satisfaction the adherence of Colombia to the basic agreements that they had previously reached on the subject. The Foreign Office statement concluded that the Ministry was studying the question.

Although the provisions of the "basic agreements" between the governments of Peru, Ecuador, and Chile are not known, extensive jurisdiction over territorial waters may be involved.

EUROPEAN NATIONS FAVOR THREE-MILE TERRITORIAL LIMIT

The three-mile territorial limit from low-water mark should be maintained universally was the unanimous opinion of a conference of European nations called by the Belgian Trawler Owners' Association in Ostend, Belgium, August 27.

The conference also expressed its willingness to meet Icelandic representatives for talks on Iceland's extended territorial limit to seek a solution satisfactory to all concerned.

The conference was attended by representatives of Great Britain, France, Belgium, Holland, and Western Germany and it was called to discuss recent extensions of fisheries limits.

It was the unanimous conclusion that the system by which territorial waters are fixed at three miles from low-water mark should be carried on universally. It should only be varied in the interests of conservation of fishing grounds and with the mutual agreement of the interested parties.

It was also felt that a meeting with Icelandic representatives would be a good thing to see if a solution satisfactory to all could be found on that country's new limits.

The question of an international federation of trawler owners was also discussed and the delegates were to report back to their respective organizations, according to the September 3 issue of The Fishing News, a British trade paper.

RUSSIA AND POLAND ALLOW FOREIGN FISHING INSIDE 12-MILE LIMIT

The Soviet Union and Poland are now allowing Swedish and Danish trawlers to fish within the 12-mile limit of their territorial waters in the Baltic, the president of the Blekinge Fishermen's Association said on August 30. Most of the fishermen trawling off Poland, Lithuania, Latvia, and Estonia are organized in the Blekinge Fishermen's Association.

"A bare month ago," he added, "the Polish and Russian patrols would have arrested Scandinavian vessels fishing in these waters. Now they even exchange information with them about the location of the best shoals," reports the September 3 Fishing News, a British fishery paper.

"This 'Operation Friendship' in the Baltic can mean new prosperity for Swedish fishermen who, through Russia's decision in 1950 to extend her waters from 4 to 12 sea miles, were excluded from some of the richest shoals."

NORTHWEST ATLANTIC FISHERIES COMMISSION

FOURTH ANNUAL MEETING AT HALIFAX, N. S.: The fourth annual meeting of the International Commission for the Northwest Atlantic Fisheries was held at the Commission's new headquarters in Halifax, N. S., from June 14 to June 18. Dr. Stewart Bates, Deputy Minister of Canada's Department of Fisheries, who was elected at last year's annual meeting for a two-year term, presided over the plenary sessions.

Reports presented at the meeting indicated that the Commission's long-range scientific program for the investigation of the fisheries resources of the Northwest Atlantic was proceeding satisfactorily and that much progress was being made in coordinating the efforts of all participating countries to obtain an accurate picture of what was happening to the fish stocks on the deep-sea fishing grounds.

For instance, up until last year when the Commission compiled its first annual catch totals, it was never known exactly how many tons of cod, haddock, halibut, and redfish (ocean perch)--the main species--were captured by the 10 nations fishing these waters, despite the fact that the banks had been fished for centuries. The collection of such

statistics is a monumental task since each country has a different method of recording their catches and different units of weight. In any program of conservation, an accurate picture of the total catch is a basic requirement.

Preliminary figures compiled by the Commission showed that in 1953 a total of 1,190,111 metric tons of groundfish (2,203 million pounds) was taken by the 10 countries fishing the Northwest Atlantic (see table). While this was some 100,000 metric tons lower than in 1952, the Commission was advised that there was no cause for alarm because the reduced catches resulted from economic factors and not from a scarcity of fish.

Groundfish Landings from the International Convention for Northwest Fisheries Area by Countries, 1953

Country	Subarea					Not Indicated	Total 1953	Total 1952
	1	2	3	4	5			
	(Metric Tons, Round Fish)							
Canada	-	11,127	233,268	161,647	76	-	406,117	463,761
Denmark	48,513	-	-	-	-	-	48,513	64,835
France	19,980	27,493	22,415	43,082	-	-	112,970	142,647
Iceland	26,253	-	-	-	-	-	26,253	48,070
Italy	-	-	-	-	-	14,293	14,293	12,164
Norway	32,016	-	-	-	-	-	32,017	22,832
Portugal	54,503	40,265	56,142	13,205	-	-	164,114	134,408
Spain	2,981	14,852	89,524	2,914	-	-	110,272	102,643
United Kingdom	35,039	810	560	-	-	-	36,410	58,581
United States	-	-	33,652	47,957	157,544	-	239,153	279,565
Total 1953	219,285	94,547	435,561	268,805	157,620	14,293	1,190,112	
Total 1952	254,190	53,777	401,582	268,973	180,549	170,436		1,329,506

The Commission, which was established in 1951, is based on a Convention signed in Washington in 1949 by 10 countries carrying out fisheries in the Northwest Atlantic area. Members of the Commission are Canada, Denmark, France, Iceland, Italy, Norway, Portugal, Spain, the United Kingdom, and the United States. Its aim is to investigate, protect, and conserve the fisheries of the Northwest Atlantic Ocean to make possible the maintenance of an optimum sustained catch from those fisheries. The Convention Area includes all waters, except territorial waters, off the North American coast from Rhode Island in the south to the west coast of Greenland and east to a north-south line from Cape Farewell to Greenland. For practical purposes the area is divided into five subareas, each of which has a panel set up to carry out the objectives of the Commission. Delegates from the countries interested in the fisheries of the corresponding subareas are members of these separate panels.

The meeting in Halifax did not produce any new recommendation for regulating fisheries nor was there any radical change made in the scientific program agreed upon by all countries last year. The results of the large-mesh regulation for the haddock fishery in subarea 5 (the George's bank area) were assessed and consideration given to extending it to other areas. The only change in the membership of the five panels was the admission of Spain to a seat on Panel 2 which is concerned with the fisheries off Labrador. All countries were represented at the meeting except Italy and Iceland.

Perhaps one of the more important developments, as far as the scientific program is concerned, was the decision to establish an advisory group of scientists to coordinate a research program for subarea 3 which includes the fishing grounds of the Newfoundland banks and adjacent waters.

The plan to set up an advisory group in subarea 3 was outlined in the report of Panel 3 submitted to the Commission by its chairman.

The report indicated that a great deal of information about the Newfoundland fishing banks has been accumulated in

recent years through the individual efforts of fisheries experts of Canada, France, Spain, and the United States. A lengthy report on research conducted into the cod, haddock, redfish (ocean perch) and American plaice in the subarea was tabled. The United States reported that it was concentrating on ocean perch research in the subarea because the catch of this species had risen from zero in 1950 to 74 million pounds in 1953. Difficulties were encountered in research because no way had been found to satisfactorily tag ocean perch.

The Commission also received reports from the four other panels. Panel 1, which is concerned with the waters off the west coast of Greenland, reported that the present condition of the stocks of fish did not call for the introduction of any regulation of the fishery. Reports of investigations were reviewed at the meeting of the panel and it was agreed that countries such as Iceland which have begun fishing on the nearly virgin stock of ocean perch in the southern part of the subarea should be asked to sample for length, age, and sex of the commercial catches of the species. It was also agreed to ask Iceland to take panel membership in Panel 1.

The report of the meeting of Panel 2 noted that the total catch for all countries in this subarea showed a large increase from 54,000 metric tons of round fish in 1952 to 95,000 metric tons in 1953. Catches by Spain had increased while Portugal took 40,000 tons of cod in the subarea in 1953. The panel did not set up a scientific advisory group and deferred the question of the elaboration of a detailed research program until the scientific advisers for the adjacent Panel 3 had reported.

Panel 4 reported that no recommendation was being made to the Commission at this time to extend the regulation now in effect in subarea 5 with regard to minimum mesh size in otter trawls. The scientific advisers to the panel, while agreeing that such a regulation would be beneficial in subarea 4, wanted to make a more thorough analysis of existing data and to complete some experiments now in progress on the selectivity of small otter trawls and line fishing gear.

Panel 5's report to the Commission was featured by a review of the effects of the large-mesh regulation which went into force in subarea 5 last year. The chairman of the scientific advisers to the panel said that boats using the large-mesh nets were catching larger fish and in greater quantities than boats using small-mesh gear. The large-mesh nets release the small, undersized haddock that are retained by the small-mesh nets and subsequently discarded by the fishermen.

The United States discussed the problem of the effect of the regulation on vessels that are engaged in lucrative fisheries for other species. The analysis of data disclosed that among vessels of less than 50 gross tons there was no undue hardship placed on the fishermen. The exemption of vessels of 50 gross tons and over would result in an exemption of 10 percent of the catch. The theory of exemption was given considerable discussion. Canada urged that the principles upon which the regulation of a fishery be based should be presented to the Commission by the panel. It was unanimously agreed that the following principles be considered:

1. In regulating a fishery there should be no exemption of vessels that are fishing solely for the species being regulated.
2. Any exemption should be kept under continual review to insure that the percentage of the landings exempted do not increase to the point where the benefits of the regulation are greatly reduced.

In a review of the status of the fishery, the United States reported on the trend in the landings of cod, haddock, and ocean perch during 1953. The research work on haddock abundance, haddock food studies, drift of haddock eggs and larvae, ocean perch abundance, and the study of age and growth of ocean perch was outlined.

In addition to the panel reports, the Commission received and approved the reports of the Standing Committee on Research and Statistics and the Standing Committee on Finance and Administration.

The Standing Committee on Research and Statistics held several meetings to

review the many scientific reports dealing with the progress being made in the over-all research program. Special reference was made in the Committee's report to the extensive review of the present knowledge of the hydrography of the Convention Area which had been prepared for the Commission by Dr. H. B. Hachey, Chief Oceanographer, Canadian Joint Committee on Oceanography, in collaboration with Dr. F. Hermann of the Danish Institute for Fishery Investigations, and W. B. Bailey, oceanographer of the Atlantic Oceanographic Group. In approving the report of the subcommittee for cod and haddock investigations, the Committee made special reference to the increasing tendency of European vessels to fish in the Convention Area and the Commission's attention was drawn to the great desirability of securing information about the catches taken in the Area and the effort exerted there by nations not at present adhering to the Convention.

Dr. Gunnar Rollefson of Norway, chairman of the subcommittee on cod and haddock, reported that European countries not signatory to the Convention have already started fishing in the Greenland and Newfoundland areas and it must be expected that the intensity of these fisheries will increase in the coming years, causing a growing toll on the stocks. The over-all reduction in the size of cod and haddock caught there will have an important bearing on the conversion of existing salt fishing to other methods of processing, such as frozen fillets and fish meal.

The Committee expressed its appreciation for the work done by the scientists of the United States and Canada in substantially establishing sound information on the rate of growth of ocean perch in the area.

Several problems in connection with the collection of statistical data were dealt with by the Committee and its recommendations were adopted by the Commission.

Plans were made for a coordinated tagging program in the Convention Area this summer. Thousands of cod and haddock will be bearing small tags of one kind or another which, when recovered, will convey vital information to the Commission. Tagging involves fixing to the live fish a mark with numbers and letters. It

may be a colored plastic strip, or a tube of colored celluloid, with a paper inside, attached by wire or nylon. Or it may be a black ebonite disk attached to the gill cover.

The fish are apparently insensitive to tags, and tagging by these methods has been standard procedure among fisheries scientists for years. Illustrated posters showing a fish with various tags are to be displayed in fishing centers in the 10 countries participating in the Convention and fishermen are asked to watch for tagged fish and report their capture to the nearest fisheries official. In this way they will be helping the Commission in its studies.

Although tagging cod presents no problem to fisheries scientists, and suc-

cess has been recently achieved with haddock, it has not yet been possible to evolve a method of tagging ocean perch. These fish, which have become increasingly important as a source of raw material for the fish-filleting industry, live in deep water and when brought to the surface suffer severe effects from the changing pressure. Some way has to be found to tag the fish in their natural habitat and scientists are giving ocean perch tagging studies a high priority in future research plans.

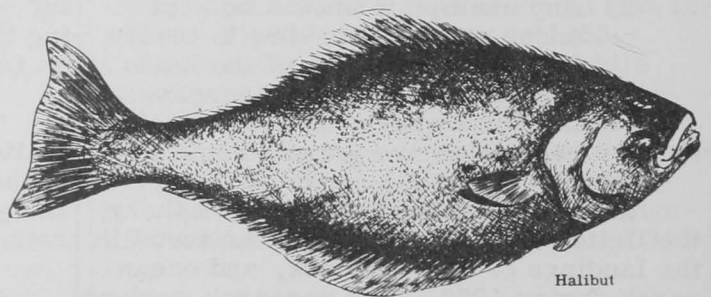
The Commission unanimously agreed to hold its fifth annual meeting in Ottawa. It was pointed out that all countries represented has embassies in Ottawa and the opportunity of bringing them in touch with the work of ICNAF was very desirable. The meeting will open on the second Monday of June 1955.

PACIFIC HALIBUT COMMISSION

HALIBUT CATCH IN 1954 BREAKS RECORD: United States and Canadian halibut landings on the Pacific coast this year were expected to amount to about 70 million pounds, almost 10 million pounds more than were landed during all of 1953, the International Pacific Halibut Commission reports. By November 15 (after which time the landing of any halibut is prohibited) the catch will probably exceed 70 million pounds and be greater than the long-standing record of 68.8 million pounds established in 1915 when the fishery was still exploiting virgin stocks in the Gulf of Alaska.

Under the unrestricted fishing of those earlier years, the annual catch declined rapidly to about 50.0 million pounds in spite of constantly increasing fishing and expansion to new grounds. In 1931, when fishing had extended clear into the Bering Sea, a nine-months' fishing season was required to secure a catch of only 44.2 million pounds. Fishing became unprofitable.

The Commission has managed the halibut fishery under treaties between the United States and Canada since 1932. By controlling the amount of fishing, it has improved the stocks, made fishing more and more profitable, and made possible the taking of larger and larger annual catches. In 1952 and 1953, under careful regulation, annual catches averaged 61.8 million pounds, an increase of 17.5 million pounds over the catch taken by the unrestricted fishery in 1931. This was as much as the Commission could safely allow to be taken from the banks under the treaty limitation which confined fishing to a single season of the year.



The new halibut treaty ratified last year permitted the Commission to establish more than one season in any area so that advantage could be taken of stocks which afforded the best fishing at different times of the year. This treaty change had been urged by the Commission since 1946. Under the new flexible authority, this year's

regulations provided such additional open seasons as the Commission believed could be established without depleting the stocks. They resulted in the present increase in catch.

The ultimate goal of the Commission is to secure the greatest possible annual yield that the banks are capable of producing year after year. To maintain such a stabilized production on a high level requires allowances for the natural year-to-year variations which appear to be inevitable in ocean fisheries. Hence, although the Commission is pleased with the greatly increased catch, it recognizes that it must carefully analyze the effect upon the stocks and must continue experimentation as the only practical way to know what is happening.

The 1954 catch will be 25.0 million pounds greater than the annual total in 1931, the year preceding regulation. At present dockside prices to the fishermen, the gain for this year alone is worth about \$4,250,000. This is three times the entire amount of money appropriated to the Commission by both countries from the time of its creation in 1923.

The International Pacific Halibut Commission reports that the recently announced all-time record halibut catch of 70 million pounds is worth over \$14,000,000 at wholesale prices. The catch as landed was worth over \$11,000,000 to 670 regular halibut vessels and 600 small boats and to the 4,000 fishermen that manned them.

With the closure on September 9 of the last regular halibut fishing season in the far western Alaska grounds (including Bering Sea) and in the waters off southern Oregon and northern California, it is now evident that the 1954 total catch will be slightly over 70 million pounds. Small quantities of halibut will continue to be landed under permit until November 15 by set-line vessels fishing for other species.

When regulation began 23 years ago, the catch was only 44 million pounds and a nine-months season of fishing was required to make the catch. Under the halibut commission's management there has been such a progressive improvement of the stocks that the present 70-million-pound catch was taken in about 2 months of fishing.

The accumulated gain in production over the 1931 preregulation level now totals nearly 250 million pounds of halibut, worth over \$35,000,000 to the fleets at the prices that prevailed during the period. In addition to this direct gain, the reduced time required to take the increased catch has left the fleets free to engage in other fisheries or other activities. This saving of effort has been worth at least an additional \$20,000,000 to the fishermen.

The combined economic gain of over \$50,000,000 has resulted from appropriations to the Commission of \$1,750,000 by both countries combined during the entire 30 years of its existence. Canada and the United States have indeed enjoyed an extremely high return from their investment.

The increase in halibut production in the regulated Pacific Coast fishery is in sharp contrast to what has occurred in unregulated fisheries elsewhere. Reduced fishing due to World War II gave European banks a chance to recuperate, but the catch from the unregulated European halibut fishery has now declined from a post-war 1950 high of 31 million pounds to about 20 million annually. Over the same 5-year period the Canadian Atlantic catch has declined from 10 million to under 5 million pounds. The New England catch that many years ago amounted to as much as 13 million pounds annually has been at or well below one-half million pounds during the past decade.

As a result of these production declines in the unregulated fisheries and the increase in the controlled Pacific fishery, the Pacific catch this year will represent about 75 percent of the world halibut production as compared to 58 percent in 1950.

Regulation of the Pacific halibut fishery and all investigations of the fish stocks by the Commission (including the tagging of nearly 55,000 halibut) have been accomplished with very modest annual appropriations from each government, ranging from \$25,000 in 1935 to \$50,000 at present. This increase in funds has been more than offset by the decline in purchasing power during the same period.

The increase in the number of halibut vessels whose catches must be checked from 250 to 670 and the increased complications arising from the subdivision of areas and the increased number of open seasons required to get the greatest production from the different stocks, all demand increased research and supervision at substantially increased cost in order to be effective. No such increases have been appropriated.

PACIFIC SALMON FISHERIES COMMISSION

FRASER RIVER SOCKEYE SALMON CATCH SETS NEW RECORD: The 1954 Fraser River sockeye salmon catch up to the latter part of September totaled 9,369,000 fish--Canadian fishermen had taken 4,586,900 fish and United States fishermen 4,782,100 fish. This catch already exceeds the total catch in any year since 1913 and is expected to break all records for its own 4-year cycle since the fishery began over 75 years ago, according to a recent report from the International Pacific Salmon Fisheries Commission.



At a meeting held in New Westminster on September 23 the Commission discussed with its scientific staff the current sockeye management program on the Fraser River and the Gulf of Georgia. After considering the data presented the Commission voted that it wished to relinquish control of all sockeye fishing in Canadian Con-

vention waters at 6:00 p.m., Saturday, September 25, thus returning control of all further fishing activity for the year 1954 to the Canadian Department of Fisheries.

Although the Commission is concerned with obtaining adequate escapement of late-season Fraser sockeye races other than the Adams stock, some escapement to these areas has already occurred and the Department's regulations for protection of salmon species other than sockeye will adequately provide for any needed additional spawning stock. For that reason further control of the 1954 fishing regulations by the Commission beyond the above specified date is not required nor is it considered desirable in view of the currently increasing runs of chum, spring, and coho salmon, the Commission pointed out.

The Adams River run normally does not need assistance at Hell's Gate because its late migration coincides with passable low-flow conditions. This year, however, the abnormal runoff throughout the season indicates that, without the fishways, the 1954 escapement of Adams River sockeye would, in all probability, have been entirely destroyed at Hell's Gate.

TRADE AGREEMENTS

ICELANDIC-CZECH TRADE AGREEMENT INCLUDES FISH: A trade and payments agreement between Iceland and Czechoslovakia signed in Reykjavik on August 31 includes fish. The trade agreement is valid for a period of three years, and the commodity lists are in force September 16, 1954-August 31, 1955, and subject to renegotiation annually. The trade agreement provides for a considerable expansion of trade between the two countries. The principal commodity that Iceland will export is quick-frozen fish fillets--a total of 6,000 metric tons as against 3,000 tons provided for in the previous agreement.

Because of the poor herring season, the quantity of herring to be exported by Iceland was decreased from 7,000 metric tons in last year's agreement to 2,000 tons this year. A new item for the 1954 agreement is fish meal--a total of 500 metric tons is to be exported to Czechoslovakia. Iceland will also export a small quantity of canned fish.

There are no fishery products among Czechoslovakia's exports to Iceland.

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DANISH-WEST GERMAN AGREEMENT INCLUDES FISHERY PRODUCTS: The Governments of Denmark and the German Federal Republic, on December 18, 1953, concluded a trade agreement which includes some fishery products. Denmark will ship to West Germany the following fishery products: Fresh and frozen salt-water fish and other quota fish products, valued at DM6.5 million (US\$1.5 million); salted herring from Faeros Islands, DM300,000 (US\$71,000); marine animal oils, DM8.4 million (US\$2 million). West Germany will export to Denmark miscellaneous fishery products valued at 450,000 kroner (US\$65,000).

WHALING

INTERNATIONAL WHALING COMMISSION SIXTH ANNUAL MEETING: The Sixth Meeting of the International Whaling Commission convened at Tokyo, Japan, July 19 and was concluded on July 23, 1954. At this meeting the Commission (1) approved the expenditures for 1953/54 and the budget for 1954/55; (2) considered recommendations made by its standing committees; (3) adopted amendments to the Schedule annexed to the 1946 International Convention for the Regulation of Whaling; and (4) determined that its seventh meeting should be convened at Moscow on July 18, 1955.

Participation and Committees: The countries represented by Commissioners were the United States of America, Australia, Brazil, Canada, Denmark, France, Japan, Mexico, the Netherlands, New Zealand, Norway, Panama, Union of South Africa, Sweden, Union of Soviet Socialist Republics, and the United Kingdom. Iceland was not represented.

Italy, Chile, Argentina, and Portugal were represented by observers, as were the Food and Agriculture Organization of the United Nations (FAO), and the International Council for the Exploration of the Sea (ICES). Due to a delay in the transmission of instructions, Peru was not represented.

The United States Commissioner, Dr. A. Remington Kellogg, Director of the U. S. National Museum, Washington, D. C., was assisted by William M. Terry, Fish and Wildlife Service, U. S. Department of the Interior, Washington, D. C., and Comdr. J. P. Martin, U. S. Coast Guard.

The major items, both of a technical and procedural nature, were referred for study to the three standing committees (Scientific, Technical, Finance and Administration) and the reports of these committees, after a joint meeting of the Scientific and Technical Committees had been held, were considered by the Commission at subsequent plenary sessions.

Summary of the Work of the Conference: On the recommendation of standing committees, a number of decisions were taken, including:

(1) The financial and administrative arrangements will continue to be handled during 1954/55, in accordance with previous recommendations of the Finance and Administration Committee, by the Ministry of Agriculture and Fisheries, United Kingdom, and in accordance with Document IB revised. The office of the Commission will be located in the Ministry of Agriculture and Fisheries, 3 Whitehall Place, London, S.W.1; the staff, apart from the Secretary of the Commission,

will be provided on a part-time basis by the Fisheries Department of the Ministry of Agriculture and Fisheries, and the financial arrangements will continue to be handled by the Finance Division of the Ministry.

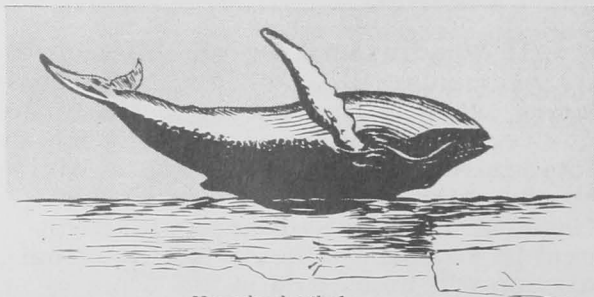
The Commission approved the table on income and expenditure for the past fiscal year and the budget for the next fiscal year.

(2) The Commission reconstituted its Special Scientific Subcommittee, providing for membership by one technical person and, in addition to giving it broad instructions, referred to it specifically the question of whale marking and the question of establishing separate catch limits for the different species.

(3) The Commission recommended that the use of aircraft for the killing of whales be brought within the scope of the Convention, and resolved that the necessary approach be made to the Depository Government.

(4) The Commission accepted and resolved to bring to the attention of Member Governments that part of the report of the Technical Committee dealing with infractions.

(5) The Commission amended the Schedule to the Convention so as to (a) prohibit the taking of blue and humpback whales in the North Pacific Ocean for a period of five years; (b) prohibit the taking of blue whales in the eastern half of the North Pacific for a period of five years; (c) prohibit the taking of humpback whales in Area II in the Antarctic for a



Humpback Whale

period of five years; (d) delay the opening of the pelagic whaling season 1954/1955 in the Antarctic to January 7 for fin

whales, and January 21 for blue whales; (e) permit Contracting Governments to declare separate open seasons for land stations used for the purpose of treating minke whales where such land stations are in areas having distinctly different oceanographic conditions. These amendments will enter into force only after acceptance by the Member Governments.

(6) The Commission took note of the possible need in the future for a drastic reduction in the over-all catch limits.

Review of 1953/54 Season's Catch: Mr. Vangstein (Norway), reporting for the Bureau of International Whaling Statistics, summarized the results of the 1953/54 season at the First Plenary Session.

During the pelagic season 1953/54 in the Antarctic, there were in operation 17 factoryships and 3 land stations with 227 whale catcher boats. Total production of oil in the Antarctic amounted to 2,285,526 barrels, including 144,518 barrels of sperm oil. Of this total, the land stations produced 184,647 barrels.

This oil production represented an increase of 167,429 barrels over the previous year, which, at 6 barrels to the metric ton, amounted to 27,905 metric tons.

Outside the Antarctic in the year 1953, the output was 397,836 barrels as compared with 429,670 barrels in 1952; and at 6 barrels to the ton represented an output in 1953 of 66,306 tons.

The Commission was advised that pelagic whaling in the Antarctic terminated on midnight March 18, 1954. By that date, 15,439 blue-whale units¹ had been taken, that is 61 blue-whale units under the authorized total of 15,500. The catching of humpbacks was permitted on the first four days of February. During that period 594 humpbacks were taken, a decrease of 355 under the Antarctic humpback catch of the previous year.

The catch of whales in areas II and III of the Antarctic constituted 77 per cent of the total taken during the 1953/54

¹One blue-whale unit = 1 blue whale, or 2 fin whales, or 2.5 humpback whales, or 6 sei whales.

season. Of the 28,500 whales taken in the Antarctic, 2,684 were blue whales and 251 sei whales, equivalent to 15,448.9 blue-whale units. In no other season since pelagic whaling commenced, except during the war years, has the catch of blue whales been so low. Conversely, the catch of finbacks during the 1953/54 season exceeded that of all previous seasons with the exception of that of 1937/38.

Since 1925/26, approximately 255,000 blue whales and 307,000 finbacks have been captured by pelagic expeditions.

Background: The Commission was established in accordance with the International Convention for the Regulation of Whaling which was signed at Washington, December 2, 1946, and which entered into force November 10, 1948. It is the responsibility of the Commission as conditions warrant, to amend the provisions of the Schedule annexed to the 1946 Convention, which are, in effect, the regulations governing the conduct of whaling by the Contracting Governments. These regulations relate to the conservation and

utilization of whale resources and include fixing (a) protected and unprotected species; (b) open and closed seasons; (c) open and closed waters, including the designation of sanctuary areas; (d) size limits for each species; (e) time, methods, and intensity of whaling (including the maximum catch of whales to be taken in any one season); (f) types and specification of gear and apparatus and appliances which may be used; (g) methods of measurement; (h) catch returns and other statistical and biological records.

The Commission is also charged with the responsibility for taking action, either independently or in collaboration with other governments and public or private agencies to: (a) encourage, recommend, or if necessary organize studies and investigations relating to whales and whaling; (b) collect and analyze statistical information concerning the current condition and trend of whale stocks and the effects of whaling activities thereon; (c) study, appraise, and disseminate information concerning methods of maintaining and increasing populations of whale stocks.

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"OLYMPIC CHALLENGER" WHALING FLEET SAILS FOR PERUVIAN WATERS: The last of the 12 whaling boats of the Olympic Challenger whaling fleet has left Kiel, Germany, for Peruvian waters. The whaling factoryship Olympic Challenger is to follow the boats and after operating in Peruvian waters for three months the fleet will go on to the Antarctic, reports the August 13 issue of The Fishing News. The fleet is owned by a Greek-born Argentine millionaire shipowner. Tankers of the shipowner's vessels will transfer the whale oil from the Olympic Challenger on the high seas and refuel the whaling factoryship.

Considerable publicity has been given in Panama about the threatened action by Ecuador and Peru against this Panamanian-registered whaling fleet. Reports indicate that this whaling fleet will be operating off the coasts of Ecuador and Peru within the 200-mile limit over which the two nations claim jurisdiction, points out a September 8 United States Embassy dispatch from Panama City. Panama's attempts to obtain Peru's acquiescence in the whaling operations apparently were unsuccessful.

According to press reports the Government of Peru warned the expedition that if it engaged in activities within that country's "200-mile maritime zone" its vessels would be seized or fired upon. The fleet's owner disputed Peru's claim to jurisdiction 200 miles seaward, and advised that his fleet is armed and will resist attempts to interfere with the expedition.

Another whaling fleet, French-Norwegian, about to start out for the same Pacific waters, reportedly adopted to remain in its home port until it learns what happens to the Olympic Challenger expedition. Press dispatches which reported regarding this second fleet added that the International Court of Justice may be requested to rule on Peru's claim of jurisdiction over 200 miles of water off its coast.

Ecuadorans, long concerned because of the "piracy" of foreign tuna boats which have fished in Ecuadoran territorial waters without first buying proper licenses, immediately took sides in the matter.

The resolutions adopted by Chile, Peru, and Ecuador at the tripartite Fisheries Conference held at Santiago, Chile, in August 1952, were not ratified by Ecuador. These resolutions included claim to the right of jurisdiction over 200 miles. One of Ecuador's reasons for not submitting the final act of the Santiago Conference to Congress at once for early ratification probably was that, because of sensitiveness over the Peruvian border situation, it did not care to support Peru in the matter. Now, however, the Ecuadoran Minister of Economy, who has jurisdiction in fishery matters, has stated that with Congress in session the time is propitious for Ecuador to ratify.

The Ecuadoran Foreign Office, prompted by the latest developments, issued a communique stating that Ecuador has taken the decision to "obtain respect for its sovereignty over waters within its jurisdiction and issued appropriate orders to the Navy to see that Ecuadoran rights in such waters are respected." The communique adds that "faithful to its international policy on this matter, and in line with the resolutions approved at the 1952 Santiago Conference, (Ecuador) is prepared to collaborate in the adoption of such joint measures on the part of the participating Governments as may be deemed necessary to defend the ichthyological wealth and to conserve the natural resources of the South Pacific.



Angola

STATUS OF THE FISHERIES: The waters along the Angolan coast are adjacent to the Benguela Stream, and a wide variety of fish abounds in them, states an August 12 United States consular dispatch from Luanda. Fish landed in Angolan ports in 1953 amounted to 222,434 metric tons as against 187,046 tons in 1952.

There was a substantial increase in most processed fishery products and byproducts (table 1).

Table 1 - Angolan Production of Processed Fishery Products & Byproducts, 1952-53			Table 2 - Angolan Exports of Fishery Products and Byproducts, 1953				
Product	1953	1952	Product	Quantity	Value		% of Total Value of Exports
				Metric Tons	Million Escudos	Million US\$	
Canned fish	1,914	1,764	Fish meal ^{1/}	46,902	167.6	5.8	4.8
Dried fish	34,085	31,986	Fish oil . .	8,336	34.3	1.2	0.9
Fish meal	41,949	28,488	Canned fish	1,415	23.0	0.8	0.6
Fish guano	366	669	Dried fish	16,089	80.5	2.8	2.3
Fish oil	6,175	2,456	Total . . .	72,742	305.4	10.6	8.6

^{1/} 29,533 tons exported to the United States.

Exports during 1953 of fish meal, fish oil, canned fish, and dried fish amounted to 72,742 tons, valued at 305.4 million escudos (US\$10.6 million). Exports for each product are shown in table 2.

Notable increases in exports occurred in fish meal and fish oil. The former increased from 29,032 tons, valued at 94.7 million escudos (US\$3.3 million), in 1952 to 46,902 tons, valued at 167.6 million escudos (US\$5.8 million), in 1953. Fish oil exports rose from 2,663 tons, valued at 12.5 million escudos (US\$0.4 million), in 1952 to 8,336 tons, valued at 34.3 million escudos (US\$1.2 million), in 1953. Most of the fish meal was shipped to the United States and Germany; fish oil to Germany; canned fish to Portugal and the United States; and dried fish to the Belgian Congo, Mozambique, and French Equatorial Africa.

Note: Values converted on the basis of one paper escudo equals 3.49 U. S. cents.

Australia

FISHERIES CATCH, 1952/53: The total catch of the Australian fisheries in 1952/53 amounted to 114 million pounds, according to the June 1954 issue of the Fisheries Newsletter, an Australian trade magazine. Mullet with a catch of 14.0 million pounds comprised 18 percent of the total catch, followed by barracouta with 9.5 million pounds, "Australian salmon" 8.1 million, shark 7.6 million, and flat-heads 6.7 million pounds. The Australian spiny lobster catch in 1952/53 totaled 15.7 million pounds and the shrimp catch 3.3 million pounds.



Canada

LOBSTER TRAP REGULATIONS REVISED: Stricter enforcement of the minimum lath spacing of lobster traps to cut down the taking of undersized lobsters is contemplated by the Canadian Department of Fisheries in revised lobster regulations passed recently under Order-in-Council.

The revised regulations make it an offense for any person to use or possess in any of the lobster-fishing districts in the Bay of Fundy area of New Brunswick and Nova Scotia, the southeast coast area of Nova Scotia, and part of the southeast coast of Cape Breton Island, lobster traps which do not have a continuous and unobstructed space measuring at least 1-5/8 inches between the two undermost laths on each side of the trap.

In the Guysborough and Halifax area on Nova Scotia's east coast, most of Cape Breton Island (except that part previously mentioned), in Northumberland Strait, the Bay of Chaleur, and the Gulf of St. Lawrence, the regulations call for minimum lath spacing of 1 $\frac{1}{4}$ inches.

The lobster fishing areas are now specified as numbered districts in the new regulations, which cover Nova Scotia, New Brunswick, Prince Edward Island, and Quebec.

The revised lobster legislation designed to bring about stricter enforcement of the regulations is part of the Department's over-all campaign against illegal lobster fishing which has become a serious problem in some parts of Canada's Maritime Provinces, reports the August Trade News, a Department of Fisheries publication.

Coupled with an intensified enforcement campaign, the Department has also inaugurated a program of education. Officials discussed lobster problems in Kent and Westmorland counties of New Brunswick and impressed upon lobster fishermen that the regulations are designed to conserve and protect lobster stocks and that continued poaching and the taking of undersized lobsters will only jeopardize their own livelihood.

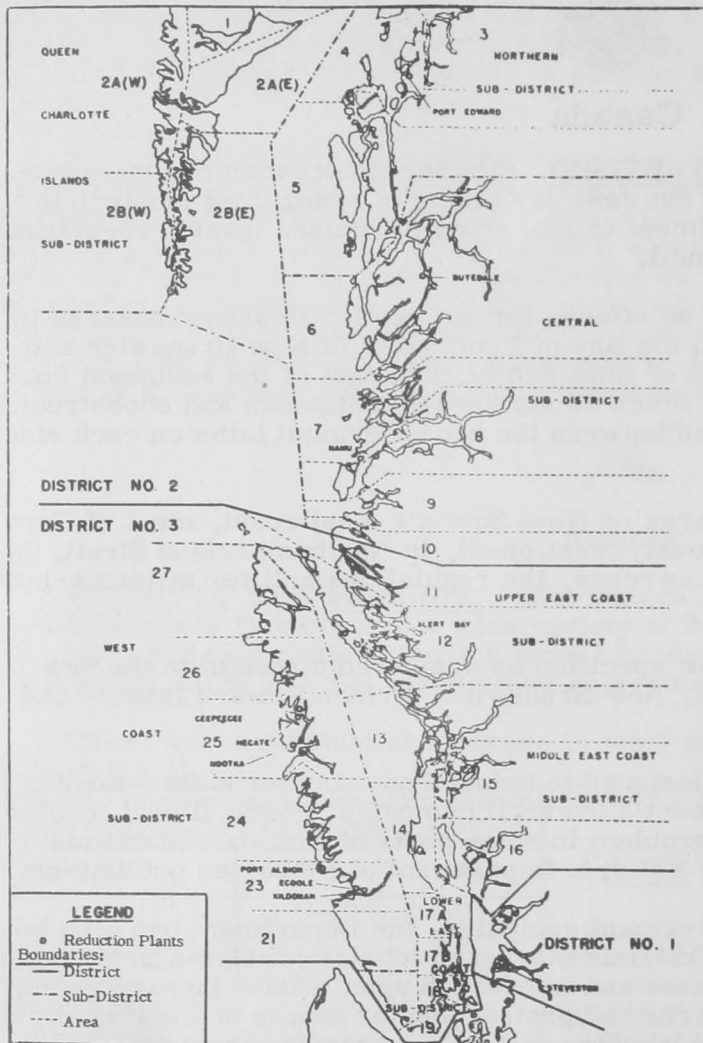
In 1953 Canada's Maritime lobster catch was 42,007,000 pounds, and had a value of C\$14,585,000 to the fishermen. This does not include the lobster catch in Newfoundland which last year was 4,330,576 pounds, valued at C\$1,109,121.

BRITISH COLUMBIA HERRING FISHERY PROSPECTS, 1954/55: The tenth in an annual series of circulars Prospects for the 1954/55 Herring Fishing Season, Circular No. 34, dealing with the prospects of the British Columbia herring fishery, was issued by the Pacific Biological Station of the Fisheries Research Board of Canada at Nanaimo, B. C. Various studies of the adult herring populations form the

basis of these annual predictions of the success of fishing. Predictions are given by area.

The salient parts of the predictions appearing in the report follow:

West Coast Subdistrict (Areas 23-27): While the catch should be better in the more southerly areas than in the more northerly areas, it is considered unlikely that as good catches will be made on the west coast in 1954/55 as in 1953/54.



Map showing the division of the British Columbia coast into districts, sub-districts, and areas.

appear, therefore, that the record catch of 1953/54 has reduced the level of abundance from the high level attained between 1949/50 and 1951/52.

In the summer of 1954 a fishery again developed in Area 14 and a catch of 4,000 tons was taken by the end of July, probably largely from resident herring stocks. It seems likely that the main migratory stock was not exploited, and for this reason it is expected that the balance of the quota will be taken from migratory fish passing through Area 13 in the fall. In view of the indications that the recruitment of the 1952 year-class and the contribution of the 1951 year-class as four-year-old fish will not be particularly large, greater fishing effort may be required to take the quota than last year.

Lower East Coast Subdistrict (Areas 17A, 17B, and 18): Although some decrease in abundance can be looked for in 1954/55, the general level of abundance is expected to remain relatively high, and the 40,000-ton quota should be taken readily. The average size of the fish will probably be greater than last year.

Middle East Coast Subdistrict (Areas 13 and 14): In 1951/52, the middle east coast stocks reached a high level of abundance but decreased slightly in 1952/53. However, because of the negligible fishery, a large carryover to the 1953/54 season resulted. In 1953/54 a summer fishery dependent on schools which apparently did not migrate to offshore feeding grounds developed in Area 14, and produced over 8,000 tons. Recruitment is believed to occur mainly to those stocks which migrate to offshore feeding grounds. A quota extension of 10,000 tons was granted to allow for the exploitation of these stocks. This quota extension was filled, resulting in the largest catch on record for the subdistrict as a whole.

Spawn deposition in the spring of 1954 was the lowest since 1948/49; a reduction of 30 percent from the 1953 level occurred in the subdistrict as a whole and spawning in Area 14, the major spawning area, was reduced by almost 45 percent. It would

Upper East Coast Subdistrict (Areas 11 and 12): Present indications are that the increase in abundance in 1952/53 was sufficient to return the stock approximately to the average level of recent years. In 1953/54 the stock was sustained almost entirely by the strong contribution of the 1951 year-class as three-year-old fish. The contributions of 1953 and 1952 year-classes as one- and two-year-old fish were among the lowest recorded in recent years.

It does not appear likely that in 1954/55 any increased catch can be expected in the fishery in this subdistrict and it is unlikely that with the usual amount of fishing effort the quota will be taken. The average size of the fish will probably be slightly larger than in 1953/54.

Central Subdistrict (Areas 6, 7, 8, 9, and 10): Population abundance in the major stocks in this subdistrict was somewhat greater in 1953/54 than in 1952/53; a catch of 31,650 tons was taken and spawn deposition, although slightly less than the preceding year, was about average. The 1951 year-class entered both the Area 7 and the Area 6 (Meyers Pass) fisheries strongly as three-year-old fish. The 1950 year-class made a relatively small contribution as four-year-old fish and indications are that while it is stronger than the weak 1949 year-class it is certainly not of more than average strength. The 1952 year-class, as two-year-old fish, was poorly represented in 1953/54.

It is considered that in 1954/55 the 1951 year-class will dominate the fishery as four-year-old fish and that the contributions of the 1952 and 1950 year-classes may be less than average for three- and five-year-old fish, respectively. Abundance will, therefore, be about the same or possibly even slightly greater than in 1953/54. Fishing in Area 7 should be better than in Area 6. The fish will be of slightly larger average size.

It is unlikely that catches in Area 9 will be as good as in 1953/54.

Northern Subdistrict (Areas 3-5): The proportion of six-year-old fish in the catch in 1953/54 was larger than normal. Since the indications have been that this year-class (1948) is not of above-average strength, its relatively large contribution in 1953/54 would indicate that the younger year-classes were probably also below average. The 1950 year-class was dominant as five-year olds. There is no reason to suspect that this year-class is of any more than average strength. The indications are that the 1951 year-class is also relatively small.

In the northern subdistrict the quota was just reached in the 1953/54 season, availability was down sharply in comparison with previous seasons, and spawn deposition was reduced somewhat from last year. These considerations and the fact that the year-classes contributing to the stock are all probably of average and below average size indicate that the condition of the northern stock is the poorest for some years. It is probable that while the quota may be taken in 1954/55 it will be taken less readily than in previous years. The average size of the fish in the northern subdistrict will be smaller in 1953/54.

Queen Charlotte Island Subdistrict (Areas 1, 2A-E, 2B-E): The stock in Area 2B-E appears to be at a high level of abundance. Spawn deposition showed a remarkable increase. The 1951 year-class as three-year-old fish made a strong entrance into the fishing stocks and should sustain the population in 1954/55. Therefore, it appears that the prospects are good for an intensive fishery in this area in 1954/55.

An intense fishery developed Area 2A-E for the first time in 1953/54; 26,000 tons were taken from the relatively restricted area of Skidegate Inlet. Spawn deposition was somewhat reduced over the previous year, but not below the level shown from 1948 to 1952. The 1949 year-class as five-year-old fish made the major contribution to the fishable stocks, but the 1951 year-class as three-year-olds

were well recruited and should sustain the fishery in 1954/55. Therefore, it is expected that a good fishery should develop in Area 2A-E in 1954/55. The average size of the fish will probably be smaller than in 1953/54.

* * * * *

PETRALE SOLE TAGGING PROJECT: United States trawlers, operating during the winter months off the west coast of Vancouver Island, have located what appears to be one of the major spawning grounds of the petrale sole or brill. This ground lies between depths of 170 and 200 fathoms, about 30 miles SSW. of Estevan Point, reports the August Trade News, a Canadian Government publication.

Petrale sole, which were tagged in Hecate Strait and Queen Charlotte Sound last summer by biologists aboard the Fisheries Research Board of Canada vessel Investigator No. 1, were caught this past winter in the Estevan spawning area by United States trawlermen.

At the invitation of the Washington State Fisheries Department, the Canadian Pacific Biological Station participated during the early part of April in a cooperative tagging project on the Estevan grounds. A staff member of the Biological Station spent a week aboard the chartered United States trawler Heather, along with a United States biologist.

The expedition encountered heavy weather and adverse conditions but managed to fulfill its objective. Operating 30 miles offshore, the team succeeded in tagging some 1,800 sole in an effort to trace the movements of these fish away from the spawning area.

Recoveries of tags by the Canadian and United States fleets this summer and in years to come should throw more light on the relation of the winter spawning stock off Estevan Point to the stocks which occur later in the year on north coast banks and also on the shallower grounds off the west coast of Vancouver Island.



Colombia

STATUS OF THE FISHERIES: Although Colombia has a considerable marine coast line and many rivers, the domestic consumption of fish is extremely small. Estimates of the total annual consumption of salt- and fresh-water fish range from 13 to 22 million pounds, or an approximate average per-capita consumption of 1.5 pounds a year. This small consumption is largely due to limited transportation facilities, geographic barriers, and limited supplies because of primitive fishing methods. As a result, there is no acquired taste for fish in the interior of the country and the consumption of fresh or canned fish appears to be rising rather slowly, with fish processors and importers attempting to educate the public to increase the demand.

No estimate has ever been made regarding the fishing possibilities in Colombian waters but they are believed to be quite considerable. It is believed that a study of marine fishing potentialities off coasts of Colombia would be of considerable value as it should provide one of the cheapest and most effective means of increasing the country's food supply. The principal fishing regions along the northern coast of Colombia at present include the area around the islands of San Andres and Providencia (Colombian islands 400 miles northwest of the mainland off the coast of Nicaragua), the islands of San Bernardo and Rosario near Cartagena, the Cienaga Grande located between Barranquilla and Santa Marta (in effect a large ocean swamp with a depth of three to ten feet), and a number of coves lying off the coast between

Santa Marta and Cabo de la Vela in the Guajira Peninsula. As far as is known, no large-scale fishing with modern equipment has ever been attempted in Colombian waters along the Atlantic coast.

Commercial fishing activities at present are limited. They are so limited in fact that there now exists only two important commercial outlets in the entire



In Colombia fish are transported to Barranquilla for marketing by canoe down the Magdalena River.

country who purchase sizable quantities of fish for processing and eventual retail on the Colombian market. Both firms are located in Barranquilla. A number of other firms have been organized in coastal cities only to be dissolved after a short period of operation as the fishing business has proved to be difficult and not immediately lucrative. Only recently a fish canning plant established at Santa Marta in July 1952 was closed down. It is understood to have been reorganized and is again operating on a very small scale. However, local trade sources state that as far as they know the Santa Marta canning plant has only been purchasing small quantities of shrimp and oysters and they do not consider it to be very active. Also recently dissolved in the past few months has been a government-sponsored firm. This firm originally was established in 1945 with a paid in capital of one million pesos (US\$549,000) for the purpose of encouraging offshore fishing, the preparation of dried fish, and establishing freezer facilities in the country to help augment the domestic consumption of frozen fish. Since its dissolution, apparently due to continuing financial losses in its operations, its functions have been absorbed by the Government's Instituto Nacional de Abastecimientos (INA) which is responsible for building storage facilities for foodstuffs and importing certain staples in short supply. The announced policy of the INA is to develop the fishing industry in the waters of San Andres and Providencia by sending refrigerated vessels to collect fish from the island fishermen and market the fish on the mainland. To date no steps have been undertaken to implement this program.

Production: Of the two fish-processing plants in Barranquilla, one is in the frozen fish business and the other cans fish and other products.

The frozen fish firm was established in 1944 and has cautiously but effectively been built up so that it covers all of Colombia. The firm operates fish-collection stations at Santa Marta, Cienaga, and Cabo de la Vela where it buys from numerous individual fishermen. All of the stations have ice manufacturing facilities. The first two are capable of storing 5-6 metric tons each of fish on ice and the latter up to 20 tons, necessary because of the slower turnover due to the greater distance from Barranquilla. The firm also operates one 63-ton fishing trawler with a capacity of 25 tons of fish but which never brings in more than 16 tons after a week to ten days of operation. This vessel uses trawl nets exclusively and its average daily catch is 1.5 tons.

The fish that are collected at the three stations and from the fishing trawler are brought to the main plant in Barranquilla where they are cleaned, weighed, cut into fillets if required, and packed in cardboard containers generally containing one pound of fish. They are then quick frozen and later transported to the main depot downtown which is capable of storing 60 tons of frozen fish. This depot sends fish by air to similar depots in Bogota and Medellia and to a distributor in Cali who operates freezing facilities. The Bogota depot can store up to 60 tons of frozen fish and the

Cali and Medellin depots from 30 to 40 tons. From these centers of distribution, frozen fish are dispatched to more than 150 stores in the entire country which daily or weekly will place their orders. To encourage this trade, the firm has imported deep freezers which it sells at cost and on credit to retail outlets in order to market its frozen fish products. The principal varieties of fish products that are marketed in their order of importance and demand are: roballo (haddock), pargo (red snapper), mojara (like perch), shrimp, oysters, lobster, corbina, and sierra. Although frozen fish is expensive and made doubly so with the costs of air transportation to the interior, the firm estimates that its annual volume of sales of frozen fish products now totals a little more than one million pounds.

The fish cannery was established in 1950 and originally canned vegetables, fruits, and fruit juices but later turned its attention to fish products as the market was especially encouraging when canned fish was placed on the prohibited list of Colombian imports. The firm expanded and built a new plant in 1952 located on the outskirts of Barranquilla at Siape which is on the bank of the Magdalena River. The cannery has a small fish pier sufficient to permit the discharge of cargo from fishing boats directly to its cold-storage room. It buys fish from three suppliers in Cartagena, Santa Marta, and Cienaga who collect from 100 to 150 fishermen each. During the fishing season which begins in October and lasts until April, from 3 to 4 tons of fish a day are collected in this fashion. The firm has also built a small purse seiner which it has used experimentally in training personnel. It does not, however, depend on the purse seiner for its supply of fish.

The cannery itself consists of a cold-storage room with a capacity of 25 tons, cleaning facilities capable of handling up to 5 tons of fish per 8-hour shift, 3 steam precookers, 2 automatic closing machines, and 3 sterilizing retorts. There is also an inspection, labeling, and storage room where the cans are taken after they have been sterilized and cooled in the retorts. Prior to precooking, all fish are cleaned, weighed, and packed by hand into cans. The fish waste is sold for fertilizer and animal feed. The cannery is planning to produce fish meal from its waste.



Market in Barranquilla, Colombia.

During the fishing season over one-half of the cannery production is mullet which is canned in tomato paste in 5-ounce cylindrical or 15-ounce oval cans (sardine style). Mullet is the most popular canned fish on the Colombian market. The remaining production consists of sardines (herring type), shrimp (dry pack), bonito (oil pack-tuna style), mackerel, and oysters. Occasionally it receives albacore tuna from its suppliers but not in sufficient quantity to pack commercially. The finished product is marketed through exclusive wholesale distributors in the major cities of Colombia. The cannery also expects to enter the frozen fish business because of the variety of fish it receives from its suppliers and on the occasions when its purse seiner is operating. Many fish are not satisfactory for canning but sell well if frozen.

Efforts to Increase the Supply of Fish: Only a few tons a day are gathered by collection stations from hundreds of fishermen along the Atlantic coast. Although the production facilities of both Barranquilla fish processing firms are quite small, the facilities are never fully used. The frozen fish firm could easily process 12 metric tons a day and the cannery could do the same but it is rare when one-third this amount is landed. A steadily increasing supply of fish would permit costs to be cut down

sharply and allow lower retail prices to create a larger demand. Both firms have been interested in different programs to increase their fish supply but have not yet been very successful.

In 1949 the frozen fish firm started a program to train fishermen in the use of more modern fishing equipment (boats, motors, and nets) which it rented or sold on credit. It attempted to instruct them in the use of small trawl nets as they considered a purse seine would not be feasible because it is expensive, difficult to handle, and could be lost or damaged in the hands of untrained fishermen. Besides, they were of the opinion that a purse seine would not be economical as the fish supply is not as abundant in warm tropical waters as it is in colder waters. After two years the firm was forced to abandon its program. It discovered that the fishermen were indifferent about caring for fishing equipment and it was often damaged or lost.

The cannery has attempted in the past year and one half to obtain the services of a purse seiner in the United States hoping to arrive at some arrangement to divide the catch. What would not be consumed locally would be sold in the United States. It was successful in having a major fish canning firm send a tuna bait boat to explore the fishing possibilities of the northern coast of Colombia in May 1953. The exploration, however, proved inconclusive due to the unseasonal heavy trade winds blowing at the time which made the ocean very rough. The firm has never been able to discover any person interested in the venture and it has since built its own small purse seiner for experimental purposes. The best success it has had so far has been a catch of three tons of fish in one purse. This has happened only once but the owners are of the opinion that with proper training and supervision, fishing by this method could prove to be economically feasible. They hope to continue experimenting and encourage, by example and instruction, a group of native fishermen to take up this method of fishing.

The cannery now gets most of its fish, particularly mullet, from the Cienaga Grande. Most of the fishing is done there with cast nets from December to April when the fish are most plentiful. The fish spawn in the ocean but come to feed and grow in the Cienaga which is protected from the strong ocean currents and waves whipped up by the trade winds that blow during this time. A purse seiner used from May to December along the northern coast when the trade winds are not blowing would permit a year-round supply of fish.

Any program to train local fishermen to use more modern methods will prove costly and is probably beyond the capital resources of either firm. Besides, the heavy customs duties on fishing equipment makes experimenting even more risky. As an example, the frozen fish firm recently had to pay almost US\$1,300 in duties for trawl nets costing about US\$1,500. As a purse seine is much more expensive, its loss or damage due to improper handling explains the difficulties and the reluctance to experiment on a large scale with modern fishing methods.

At present, two small United States-owned vessels are collecting fish off the island of San Andres and packing them in ice for sale on the mainland. The vessels carry only 9-12 metric tons of fish and they are unable to purchase ice on the island but must bring it from Cartagena. Marketing the fish has also proved difficult as the buyers and prices were not arranged for in advance causing spoilage while the fish were waiting for the highest bidder. This venture is not expected to continue although with the proper equipment and organization it could be profitable.

Marketing and Imports: The domestic price of fish products is very high due to small local production and customs protection. On March 20, 1951, all canned fish were placed on the prohibited list of Colombian imports. Prior to this fresh fish was also on the prohibited list as it was made impossible for a person to obtain a license to unload fresh fish on the domestic market. Canned fish was again

permitted entry under the terms of Decree 1830 of August 1, 1952, subject to the purchase of export certificates earned and sold at a premium by exporters of certain Colombian agricultural products. In addition to the premium which averages about 40 percent of the dollar value of the import, the duty on canned fish is 80 centavos a kilo (14½ U.S. cents per pound) and 25 percent ad valorem, and the duty on fresh fish is 30 centavos a kilo (5½ U.S. cents per pound) and 25 percent ad valorem. This means that a case of 48 15-ounce cans of mullet, sardine style, imported from Europe at a cost of US\$8.00 pays US\$10.80 in duties and export certificate premiums.

In spite of the heavy duties, canneries suffered when canned fish was removed from the prohibited list. It did not affect the frozen fish business. During 1953 when the Colombian market was flooded with European and Japanese canned fish imports, the Colombian cannery did very little canning. It later lowered its prices 25 percent to meet the competition and has slowly regained its domestic market. Nevertheless, costs are high because the supply of fish is small and irregular. The factory prices of canned fish to wholesalers in August 1954 as compared with August 1952 are as follows:

Species	August 1954		August 1952		Case and Can Size
	Price Per Case		Price Per Case		
	Pesos	US\$	Pesos	US\$	
Mullet or sardines	48.00	19.12	60.00	23.90	48 cans, 15-oz. oval
Mullet or sardines	40.00	15.94	50.00	19.92	100 cans, 5-oz. cylindrical
Bonito	50.00	19.92	76.00	30.28	48 cans, 7-oz. cylindrical
Shrimp	72.00	28.69	84.00	33.47	48 cans, 5-oz. cylindrical
Oysters	85.00	33.86	-	-	48 cans, 5-oz. cylindrical

The wholesale price of certain frozen sea-food items sold by the frozen fish firm to distributors in the interior average about Ps. 1.60 (63 U.S. cents) a pound for roballo fillets, Ps. 2.25 (90 U.S. cents) a pound for pargo fillets, and Ps. 3.00 (US\$1.20) for an 8-ounce box of shrimp or lobster.

Import figures are not complete but show a sudden spurt in 1952 when canned fish was removed from the prohibited list. The import figures for canned fish in 1953 are estimated to have reached at least 4.4 million pounds.

Outlook: The principal problem for the Colombian fishing industry continues to be the primitive fishing conditions. Efforts to overcome them have so far been left in the hands of small private organizations. Recently a decree (No. 1785, June 8, 1954) was issued for the control of fresh-water fishing which prohibited certain types of fishing, such as the use of explosives; and provided for the promotion of the fresh-water fishing industry by authorizing scholarships for the study of fisheries; the employment of foreign technicians; establishing fishing schools; and the duty-free importation of certain items used by the fishing industry. So far, no measures have been taken to put into effect such a program. If a similar decree were authorized for salt-water fishing, it could give added impetus to private efforts now being undertaken.

In spite of the difficulties encountered by the Barranquilla fish industry in trying to augment its supply of fish, it is encouraging to note that the supply has been growing slowly. There are now more fishermen working in the Cienaga Grande. Outboard motors for the fishing launches are beginning to replace poles as a means of propulsion and larger cast nets are being used. The fish-processing firms who were receiving a daily catch of 2-3 metric tons during the 1953 fishing season have received from 3-4 tons a day in 1954.

Year	Quantity	Value (c.i.f.)	
		1,000 Pesos	1,000 US\$
	Metric Tons		
1952	273	448	178
1951	2	4	2
1950	1/	1/	1/
1949	146	155	62
1948	1,116	1,189	474
1947	2,022	2,718	1,083
1946	634	934	372

1/Not available.

With the removal of canned fish from the prohibited list, the past 18 months has been a period of readjustment and trial for the fish-canning industry. However, the present heavy customs protection is expected to continue. This protection coupled with a slowly increasing supply of sea food from local sources should provide a more encouraging picture to Colombia's small fishing industry in the coming year.



Cuba

MEMBERSHIP IN NEW ASSOCIATION REQUIRED OF ALL VESSELS FISHING CUBAN WATERS: All fishing vessel owners or operators fishing in Cuban waters, regardless of nationality, must be registered with the newly-created National Association of Fishing Vessel Operators (Asociacion Nacional de Armadores de la Pesca). This law was promulgated by Decree No. 1670, published in the Oficial Gazette No. 207 of September 6, 1954, and includes vessels in the categories of the Third List of the Registry of Vessels under the supervision of Port Captains. Such registration is compulsory under threat of fine. Lighters, small fishing boats of not more than 16 feet over-all in length, and presumably pleasure craft, are exempted from registration.

The Decree also establishes a compulsory fee or tax of between 10 and 40 U. S. cents per net ton or fraction thereof for each vessel owned by any one member of the Association. The revenues received to be distributed as follows: 15 percent to meet management expenses of the Association; 20 percent for the Cuban National Fisheries Institute; and the remaining 65 percent for the improvement of the fishing fleet and the purchase of new fishing units and equipment.

No owner of fishing craft or vessel subject to registration will be permitted to sail or operate unless he joins the Association and is paid up on the monthly tonnage dues. He will be subject to a fine of from 10 to 25 pesos (US\$10-25) which is doubled or tripled if the offense is repeated.

A period of 60 working days is granted for the registration of all vessels falling under the categories established in the Third List of the Registry of Vessels with Cuban flag.



Denmark

SELECTED CANNED FISH EXPORTS, JANUARY-JUNE 1954: Canned sprat sardines and canned mackerel have comprised the bulk of the Danish canned fish exports in the past few years, according to a September 1 U. S. Embassy dispatch from Copenhagen. Sprat sardines have accounted for about 60-65 percent and mackerel about 20-25 percent of the total Danish canned fish exports. In 1952 and 1953 the United States market took 396 and 383 metric tons, respectively, of sprat sardines from Denmark (see table). This was 15 and 20 percent of Denmark's total exports of canned fish and 90 to 95 percent of the total exports of canned fish to the United States. Export of sprat sardines to the United States in 1954 is not expected to differ much from preceding years.

Canned mackerel exports to the United States increased greatly in the first half of 1954 as compared with 1953; however, even then, in the latter period the

Item	Jan.-July 1954			Total 1953			Total 1952		
	Metric Tons	1,000 Kroner	1,000 US\$	Metric Tons	1,000 Kroner	1,000 US\$	Metric Tons	1,000 Kroner	1,000 US\$
Sprat Sardines:									
Total exports	1,140	3,692	534	1,895	8,669	1,253	2,571	14,305	2,067
Exports to U.S.	235	1,069	154	383	2,297	332	396	2,668	386
Mackerel:									
Total exports	197	491	71	612	1,752	253	986	4,295	621
Exports to U.S.	60	119	17	3	19	3	1	5	1
Anchovies and Small Herring:									
Total exports	8	48	7	29	133	19	49	239	35
Exports to U.S.	-	-	-	-	-	-	2	12	2

exports totaled only 60 metric tons, valued at 119,000 Danish kroner (US\$17,000). Denmark's exports of sardines, anchovies, and small herring to the United States were insignificant.



France

TUNA VESSELS USING SALT-WATER ICE: The use of salt-water ice to preserve the catches of tuna vessels and trawlers operating out of ports on the Isle d'Yeu in France has been reported. A French firm built a plant for the manufacture of ice from sea water adjacent to this port in the fall of 1953. As a result of the severe weather conditions prevailing on the nearby fishing grounds at that time, a thorough test of the efficacy of salt-water ice was possible.

One tuna sailing vessel, carrying 13 metric tons of this type of ice, caught substantial quantities of tuna the last few days of August 1953. Tornadoes sweeping the area prevented the vessel from docking at a port. Although the fish had been in ice for 27 days when landed, the cannery manager judged the entire load acceptable for processing. The eyes of the fish were bright and the meat firm.

Other reports of tuna catches stored aboard vessels 14 days in sea-water ice showed that the temperature in the muscle area of the tail section on landing was 32° F. for fish weighing approximately 12 pounds each. A vessel using regular ice on an 18-day trip had tuna aboard that showed a temperature of approximately 46° F. for the same size fish.

A trawler, carrying both regular and sea-water ice, had small gurnards aboard after 5 days in regular ice at meat temperatures of approximately 39° F. This species, stored in salt-water ice, had meat temperatures of 37° F. after the same storage period.

Hake stored at sea in salt-water ice for two days and thereafter ashore in this ice in boxes at 32° F. storage for 5 days were adjudged excellent in appearance. The temperature of the meat then was 33° F.

Some of the characteristics of the salt-water ice claimed as beneficial for fish preservation are: (1) ice melts at approximately 24° F.; (2) melt water has salinity

of 10-12 percent; (3) preservation of fresh-fish flavor that only sea-water ice can retain.

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TAXES ON IMPORTED FISHERY PRODUCTS REDUCED: Certain agricultural and fishery products have been exempted from the French "transaction" tax and France has provided fixed-rate deductions from the "value added" tax levied on various preserved foods by a decree of June 28, effective July 1, 1954.

The French transaction and value-added taxes are sales taxes levied on domestic sales and imports, the U. S. Department of Commerce reported on September 27.

Fishery products exempted from the transaction tax and their French import tariff numbers are the following:

- Ex.24. Fillets of sea fish, fresh or preserved, in fresh condition.
- Ex.25. A. to E., Fish simply salted, dried, or smoked.

Deductions from the value-added tax applicable to certain preserved foods are allowed to avoid double taxation on agricultural or fishery products incorporated in the preserved products. The fishery products to which these deductions apply and rates of rebate are:

- Ex. 164. Fish, prepared or preserved, put up in tins, glasses, jars, or hermetically sealed containers, except salmonidae and tuna: 15 percent.
- Ex. 164. Prepared or preserved tuna, put up in tins, glasses, jars, or hermetically sealed containers: 25 percent.

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FISHING AND MARITIME INDUSTRIES CONGRESS: The Fifteenth National Fishing and Maritime Industries Congress was held in Algiers, Algeria, June 22-26, 1954. The Congress was the regular biennial congress of the French fishing and maritime industry, at which problems concerning the industry were discussed--principally the lack of credit available to small operators and processors, a September 15 U. S. Consular dispatch from Algiers reports.

The Congress had also invited foreign representatives with the purpose of forming an international organization to promote consumption of marine products. Delegates from Portugal, Italy, Greece, Yugoslavia, Denmark, Morocco, and FAO attended.

At the last meeting of the Congress it was decided to form an international association to promote the consumption of marine products, "Association Internationale de Propagande pour la Consommation des Produits de la Mer." It was stated that Belgium, Great Britain, and the United States have given their accord by letter. (It is not known what American organization sent the letter.) The next meeting of the new association will be held in Lisbon in 1955. The next biennial National Fishing and Maritime Industries Congress will be held in Brittany, at a city not yet decided upon.



German Federal Republic

GOVERNMENT TO SUBSIDIZE NEW FISHING VESSELS: The West German Government has announced its intention of assisting, through direct subsidy, in the construction of new luggers--special small vessels designed for herring fishing. This program will not only help to modernize the overaged lugger fleet but it will give some relief to the hard-pressed smaller West German shipyards, a U. S. consular report (August 18) from Bremen points out.

The West German Federal Government will make available DM 4 million (US\$1 million) to aid in the modernization of the overaged West German lugger fleet. The funds will be appropriated from returns derived from ERP counterpart investments in Western Germany. This appropriation will cover 30 percent of the total cost of construction estimated at about DM 12 million (US\$2.9 million), which will build 12 luggers. The fishing companies participating in this program of rationalization will be required to finance at least 20 percent of the construction cost from their own resources. The remainder will probably be covered by tax-favored credits to be extended under a still-existing paragraph of the West German income tax law. It is expected that this vessel construction program will alleviate somewhat the critical position of the West German medium and small shipyards which are being faced with the necessity of reducing their labor forces due to a lack of new orders. The keels were scheduled to be laid in September of this year, and the vessels are expected to be delivered shortly before the start of the next herring season in June 1955.

The 12 new vessels--of which 5 will go to Vegeaack, 2 each to Leer and Emden, and 1 to Glueckstadt--are part of a long-range program developed by the lugger fishing trade to build 30 new vessels within the next 5 years. The Federal Government seems to be willing to continue its aid beyond the DM 4 million (US\$1 million) already committed, presumably on the 30 percent basis. However, since tax-favored investments will most probably no longer be permitted in 1955, the financing of the rest of the long-range plan appears to be difficult. Trade representatives are reported to have indicated that interest subvention might be one of the means to enable the lugger fisheries to obtain the required funds in the capital market.

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PROCESSED FISHERY PRODUCTS, JANUARY-JUNE 1954 AND YEAR 1953: There were some slight increases in the West German production of processed fishery products during the first six months of 1954, according to a September 24 U. S. consular dispatch from Bonn (see table). Fish meal and fish oil showed the largest increases over the first half of 1953 and there were slighter increases in the production of canned and marinated fish. Shellfish and smoked and salted fish were all produced in smaller volume during the January-June period of 1954 as compared with the similar period a year earlier.

Item	1954		1953	
	Jan.-June	Jan.-June	Jan.-June	July-Dec.
	(Metric Tons)			
Smoked fish	13,697	16,414	18,301	34,715
Salted fish	1,991	3,133	27,578	30,711
Marinated fish	21,137	18,243	35,626	53,869
Canned fish	15,120	14,183	27,662	41,845
Shellfish (processed only)	218	249	341	590
Miscellaneous fish products	2,383	2,263	3,001	5,264
Fish oil	5,449	4,781	15,007	19,788
Fish meal	34,605	30,391	44,833	75,224

CATCH REGULATION PLAN UPSET BY LIGHT LANDINGS: The West German Food Ministry announced in mid-August that it had asked the Association of West German Fishing Companies to do everything possible to help improve the supplies of fresh fish for the German market. Recent bad weather conditions, substantially reducing fish catches by West German vessels, have upset the Government-approved plan to regulate fish landings, local newspapers reported, following a statement issued to that effect by the Federal Food Ministry.

The plan had provided for the use of 40 percent of the trawler fleet for the catching of white fish in August, 50 percent in September and October, and 70 percent in November--the balance to be used in herring catching. The plan was to avoid an oversupply of herring--the catching of which is more lucrative due to shorter trips and relatively bigger catches--and a resultant disruption of marketing conditions on the one hand; and to insure an adequate supply of white fish on the other.

The unusual summer storms, however, greatly hampered fishing activities. Comparing the last week in July and the first two weeks of August with the same period of 1953, white fish catches of deep-sea trawlers were about 33 percent lower, while herring landings fell about 23 percent short of last year's level. As a result, prices rose considerably.

The Federal Food Ministry urged the Association of Trawler Fisheries to do everything in its power to improve the white fish supply and to request its members not to land fish in foreign ports. The Association has pointed out, though, that it has adhered to the catching plan, and that any diversion of herring catchers for white fish catching would reduce still further the already inadequate supply of herring. The Food Ministry has also announced its intention of stimulating the importation of fresh fish to fill the present gap. Fish traders, however, are skeptical as to the success of these endeavors, since other countries are having similar difficulties in their fish supply, states an August 18 U. S. consular dispatch from Bremen.

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FISHERY RESEARCH VESSEL LAUNCHED: The West German fisheries research vessel Anton Dohrn was launched in Cuxhaven on August 16. It is the third ocean fishery research vessel in German history. The West German Government has appropriated DM 2.5 million (US\$590,000) for construction of the vessel to be operated by the Federal Research Institute for Fisheries in Hamburg. The vessel will presumably be put into service in December 1954.

The Anton Dohrn is equipped with the most modern nautical navigation aids including echo-sounding equipment and radar. The over-all length is 204 feet, length between perpendiculars 177 feet, width 34 feet, draft 15 feet, and measures 800 GRT. It is steam propelled with 850 hp. and develops a speed of about 12 knots per hour. The vessel is equipped with a special rudder with a 100 hp. electric motor to give added towing power and improved maneuverability.

Special model tests were made to achieve a high stability to insure continued research even under bad weather conditions. The vessel has a double deck. The top deck carries the usual fishing gear, and research equipment is located on the lower deck. The vessel has laboratories for biological, oceanographic, chemical, and bacteriological research.

The ship's fish hold has a capacity of about 100 metric tons. A deep-freeze plant, a fish-meal plant, and fish-oil extracting equipment have also been installed. Research to be conducted will cover every imaginable phase of the fishing industry, including exploration of fishing grounds; developing and testing of new fishing gear, especially nets and net material; and all forms of processing and preserving fish.

The Anton Dohrn will carry a crew of 25, and has accommodations for 20 scientists. The vessel has also been equipped with a small hospital, since it is expected to assist two other government-operated ships in rendering medical, technical, and other types of aid to fishing vessels on the high seas, a U. S. consular dispatch (August 18) from Bremen points out.



Iceland

TRAWLERS GET AID FROM AUTO IMPORT TAX: Icelandic trawlers have been having difficulties in obtaining crews as they have been unable to pay wages competitive with land jobs, according to the September 3 International Financial News Survey. A tax (equal to 100 percent of the f. o. b. value) on automobile imports from Western Europe and the United States has been levied by the Icelandic Government to assist the vessels. The proceeds from the tax is estimated at 12-15 million kroner (US\$740,000-920,000) for 1954.



India

NEW TYPE DEEP-SEA FISHING VESSEL LAUNCHED IN MADRAS: A prototype 24-foot deep-sea fishing vessel (Pablo), built by the Fisheries Department of the Madras Government under the supervision of an FAO-sponsored Norwegian naval architect, was launched at Madras harbor on September 10. This vessel is round-bottomed with a vertical keel. It is 24.6 feet long and 6 feet 10 inches wide, with a total displacement of 2.6 tons. It is fitted with a semi-Diesel engine of 10hp. capable of a speed of 8.5 knots. The cost of building the boat was Rs. 5,000 (US\$1,048). The engine was imported from Norway.

The Madras Deputy Director of Fisheries in his welcome speech on the occasion stated that the seas round Madras State were very rich in fish. He pointed out that one grave handicap to the development of the fishing industry of Madras was the economically backward state of most of the fishermen, many of whom were heavily indebted to middlemen. He stated that under the Indo-American Technical Cooperation program, the Government of Madras would soon receive about 30 marine Diesel engines, a few of which had already arrived for fitting in fishing boats. In addition to the vessel, the Norwegian architect has built a surf landing craft to replace the conventional catamaran (a type of raft composed of 3 or 4 logs lashed together). In addition to getting modern fishing vessels under the Technical Cooperation program, Madras is to receive a large quantity of fishing gear (hooks, lines, nets, nylon, etc.) from the United States. He said that Madras State expected from Canada under the Colombo Plan up-to-date fishing vessels and large quantities of implements.

The architect said that the vessel Pablo was only a step in the direction of increasing fish production in the country. He observed that interesting features, such as the round bottom of the traditional Indian boats, had been incorporated in the design. He noted that the most interesting feature was the net chute by which the net could be laid out by the engine in motion. To insure safe operations, he said, the rudder and propeller had been protected by an overhanging stern. He added that the mechanical devices had been designed as to save much of the labor involved in deep-sea fishing and at the same time to increase the fishing capacity of the boat.

The Madras Minister of Agriculture said that the launching of the boat was a landmark in the activities of the Fisheries Department of the Government of Madras.

He spoke of the great risks and hazards to which Madras fishermen were exposed while deep-sea fishing in catamarans and urged the use of power boats. He stated that the Madras Government was interested in developing the marine fishing industry and helping fishermen. Referring to England, Japan, and other countries where fishermen were organized into cooperative societies, he suggested the formation of such societies to use modern equipment and thereby increase the income of fishermen.



Japan

NORTH PACIFIC SALMON CATCH, 1954: The 1954 catch of the Japanese North Pacific mothership salmon fleets totaled 20,493,645 fish, over $2\frac{1}{2}$ times the 1953 catch of 7,700,176 fish, according to the Japanese Fishery Agency's figures printed in the Japanese press (Nippon Suisan Shimbun, September 6). In terms of catch per fishing vessel, last year's figure was 73,335 fish, compared with 99,969 fish for this year. Last year there were 3 fleets with 93 independently operating fishing vessels and 12 scouting boats, a total of 105 boats; whereas this year's 7 mothership fleets had a total of 205 fishing vessels (160 catchers and 45 research boats). The fleets commenced operations between May 15 and May 20 and left the fishing grounds between August 11 and 23.

Compared with last year, weather and sea conditions this season were good and the catch was also better. The catch by species--in number of fish--was as follows (figures in parentheses for 1953): red or sockeye, 3,816,874 (1,579,850); chum, 9,403,035 (2,707,134); pink, 5,801,615 (3,065,336); silver and other, 1,472,121 (347,856). Of the 1954 catch, the amount of fish set aside for canning by the motherships yielded 270,375 cases of canned salmon. It is reported also that 25 million pounds of salmon were salted and 26 million pounds frozen.

Note: This supersedes the preliminary data published in Commercial Fisheries Review, October 1954, pp. 63-64.

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RESEARCH VESSEL STUDIES NORTH PACIFIC SALMON FISHERY: The Tokai Regional Fishery Research Laboratory's vessel Tenyo Maru (218 tons) returned to Tokyo on September 1 from a northern oceanographic cruise of about 110 days' duration, the purpose of which was to study the salmon fishery. The vessel sailed from Tokyo on May 17. During the cruise long lines were set and other experimental operations carried on in the Bering Sea and 500 miles off the Aleutians--good results were obtained. It appears that interesting data were also collected in the oceanographic investigations, according to the Japanese press (Nippon Suisan Shimbun, September 6).

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CERTAIN TRAWLERS PERMITTED TO FISH FOR TUNA: The Japanese Fisheries Agency has adopted a policy to allow tuna fishing by vessels which gave up trawling as a condition of being permitted to engage in the salmon fishery. When the salmon season ended, these vessels were looking for an off-season fishery. There are said to be about 80 vessels seeking to take up tuna fishing on a part-time basis, the Japanese press (Nippon Suisan Shimbun, September 6) reports.

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COD AND FLATFISH OPERATIONS IN BERING SEA: Cod and flatfish taken by the Japanese trawler Asama Maru in northern Pacific waters (principally the Bering Sea) brought unexpected high prices in Japan of 120 to 170 yen per kan (about 4 to 7 U. S.

cents per pound). The company operating this 993-ton trawler received permission from the Japanese Fisheries Agency to conduct experimental trawling for sole and cod in those waters. The vessel left Hakodate June 22 and returned August 8. The same trawler sailed again on August 14 and was scheduled to leave the fishing grounds south of Nunivak Island about September 12.

As a result of the success of the Asama Maru, the same company launched another North Pacific trawling operation using a vessel which had served as a mother-ship in this year's salmon fishery.

This company as well as other companies have since sent out several other fleets to fish in the Bering Sea waters for cod and flatfish. Most of the fleets were expected to leave the fishing grounds by the end of October.

The Japanese Fisheries Agency has set the limit of each expedition at 4,500 metric tons, expected to consist chiefly of sole. Part of the fish caught by these expeditions will be salted and the remainder frozen. Taking of halibut, crab, and salmon is prohibited.

JAPANESE GOVERNMENT



Norway

NORWEGIAN SARDINES-U. S. MACARONI TIE-IN ADVERTISING: The Norwegian Canners Association has joined United States macaroni manufacturers in a promotional tie-in for Norwegian sardines and American macaroni, reports a September 2 news release from the Norwegian Information Service.

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TUNA CATCH CONTINUES GOOD: Norwegian fisherman had taken 7,900 metric tons of bluefin tuna through August 21, according to the August 26 issue of Fiskets Gang, a Norwegian trade publication. Of the total, 4,400 tons was exported in ice, and the balance in frozen form.

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HERRING FACTORYSHIP ORDER FROM GERMANY: A Norwegian firm has ordered from a German shipyard a vessel intended as a combined herring trawler and factoryship, reports the September 18 Foreign Trade, a Canadian Government publication.



Panama

TERRITORIAL WATERS REGULATIONS DEFINED: Panama's territorial waters extend to a distance three miles offshore, according to the Chief of the Mining and Fisheries Department of the Panamanian Ministry of Agriculture and the Port Captain of Panama City. In addition, Panama claims jurisdiction over waters of the country's continental shelf. These and the following points were answers to questions on commercial shrimp fishing off Panama, a U. S. Embassy dispatch (September 17) from Panama City points out.

However, Panama has not enacted a law defining the extent of its territorial waters and/or legally establishing the Government's position with regard to the continental shelf. Panama would appreciate, however, if captains of fishing vessels

operating off its coast in international waters (outside the territorial and jurisdictional waters) would comply with rules and regulations as set forth by international conventions for conservation of fishery resources, such as, for example, the Whaling Convention.

To operate in Panamanian territorial waters for fish and shrimp, Decree 172 of August 5, 1953, provides that only fishing craft built in Panama may engage in commercial fishing operations within the territorial and jurisdictional waters of the Republic. There are exempted from this regulation foreign-built vessels which fish for bait exclusively in the Pacific waters south of latitude 8° 30' N.

Principal ports for Panama are in the Canal Zone. These are the ports of Balboa on the Pacific, and Cristobal on the Atlantic side. The rules and regulations governing navigation of the Panama Canal and adjacent waters (under the jurisdiction of the Canal Zone Government) require that on arrival (at either Cristobal or Balboa) there shall be ready for immediate delivery to the boarding party, for inspection or delivery, as the case may be, such papers, and numbers of copies of each, concerning tonnage of vessel, cargo, persons on board, health conditions, pratique, and such other matters upon which information is necessary, as may be prescribed by the Governor. The required manifests, lists, and statements shall be sworn to by the master or agent of the vessel. Failure to have the prescribed papers upon arrival will subject the vessel to delay, but not to fine.

All documents listed below as being required of a ship should be ready for immediate delivery to the boarding party:

- Ship's information sheet (Panama Canal form)
- Clearance from last port
- Quarantine declaration (International Standard form)
- All other certificates of a sanitary nature
- Passenger list (Panama Canal form)
- Crew list (Panama Canal form)
- Store list
- Cargo declaration (Panama Canal form)
- Manifest of local cargo
- Declaration of explosive cargo carried
- Declaration of inflammable or combustible liquids in bulk carried as cargo
- Statement of fuel account (for vessels in ballast only)
- Panama Canal tonnage certificate
- National register
- General arrangement plan of vessel
- Report of structural alterations and of changes in use of tanks or other spaces since last transit

In compliance with Panama's maritime laws, any vessel calling at a Panamanian port must have, duly certified by a Panamanian consular officer, a copy of its manifest or cargo list, bill of health, crew list, and passenger list. These documents are in addition to the "Touch and Trade" papers and whatever other documents required by the country of vessel registration.

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FISHERIES TRENDS, 1953: Bait Fishing: Activity in the Panama fisheries during 1953 indicated that the Government was attempting to regulate the industry to benefit the general economy of the nation, an April 15 U. S. Embassy dispatch from Panama points out. As an earlier decree had been ineffective, the Government early in the year modified its bait fishing decree of December 1952 to require bait fishing boats in Panamanian waters to purchase only supplies and have small repairs done

in the Republic instead of in the Canal Zone. The earlier decree had required that all supplies, lubricants, and fuels be obtained and repairs made in the Republic and none in the Canal Zone. As of June 12 a new bait fishing decree (No. 148) was promulgated by which was provided a three-months closed bait fishing season from November 1 to February 1 of each year; and also established a new tariff for licenses of US\$11 for each net ton of a vessel's weight instead of the US\$15 formerly collected, the validity of which would be for one year from the date purchased.

Shrimp: Decree No.172 of August 5, regulates commercial fishing in Panamanian waters and in effect restricts such fishing to Panamanians and Americans. At the same time press reports appeared indicating that most of the country's shrimp fishing companies would be combined into one large firm. Within a few months' time, shrimp fishing outfits with an estimated capitalization of US\$2 million had been merged with control resting with prominent Panamanians, although at least one well-known American was associated in an executive capacity with the new firm. In addition, considerable United States capital was reported to be invested in the new combine.

The growing importance of the shrimp industry is revealed in the exports principally to the United States. The following table shows the growth of the industry since 1950.

The shrimp export business increased in volume over 1,400 percent in 1953 as compared to 1950, and increased over 1,000 percent in value during the same period. The merger of the shrimp fishing interests should accelerate the upward trend, as the economies to be expected in operations plus the more favorable marketing facilities accruing to a large-scale business organization, can conceivably be used to better advantage in supplying the American market with a greater portion of its requirements.

Year	Pounds	Value US\$
1953	4,583,636	1,915,585
1952	2,399,867	1,350,189
1951	1,238,520	704,680
1950	304,284	167,579

Other Fishing: Official statistics indicating other fishing activities in the Gulf of Panama, where practically all commercial fishing is done, reveal that total fish (not including shrimp) production during 1953 amounted to approximately 2,146,400 pounds, or a decrease as compared with 2,686,269 pounds during the previous year, 1,892,075 pounds in 1951, and 1,529,886 pounds in 1950. Despite the decrease in 1953, the general trend of the fishing industry appears to be upward, particularly as regards shellfish.

Territorial Waters: Toward the end of the year the Government reported to the National Assembly that the lack of suitable regulations was resulting in illegal fishing in Panamanian waters by foreign vessels, and asked that appropriate legislation be enacted. A few weeks later a comprehensive fishing law was introduced into the Legislature, a law which seeks to codify and modernize all Panamanian legislation dealing with the nation's fisheries and marine wealth; a law which proposes to extend Panama's territorial waters to the edge of the Continental platform; and which claims all marine wealth within this area for the nation. As drafted, this law tends to monopolize fishing resources for Panamanians and to increase the Government's income as the result of the exploitation of such resources. (At the end of the calendar year, the Legislature had not taken any action on this law. At the closing of the Legislature's session in February 1954, no action had been taken, but a special powers bill passed at the conclusion of the session delegated authority to the President to take such action by decree as might be necessary to protect the nation's marine wealth.)

Outlook: The steadily rising shrimp industry seems to indicate that the Government's self-sufficiency policy is being effectuated in this field, whether it be considered as a result of such policy or not. The importation of fish into Panama has been, and still is, a source of considerable leakage of funds abroad, as the domestic catch has not been able to satisfy local requirements over the past few years. Beginning in 1952, however, the markets in urban areas began to be able to supply in part local requirements, although prices tended to restrict demand to middle and upper income groups. In any event, fresh, locally-caught fish were readily available most of the time in outlets in and around Panama City during 1953. As a result of the foreign demand for locally-caught shrimp, however, this delicacy has almost priced itself out of the local market, except for upper income groups. Prices of other types of fish on markets a few miles from Panama City, however, were well within the reach of all income groups. If the present trend in the industry continues, it is possible that most fish, other than shrimp, will within the next few years be available on the market at Panama City and at prices which all can afford.



Spanish Morocco

CANNED FISH PRODUCTION, 1953: The canned fish production in Spanish Morocco during 1953 totaled 3,325 metric tons, valued at 66.5 million pesetas (US\$1.6 million) to the packers, according to a September 10 dispatch from the U. S. Legation at Tangier. This is an increase of 11 percent in both volume and value as compared with the 1952 production of 3,000 metric tons, valued at 60 million pesetas (US\$1.4 million).

WHALE OIL PRODUCTION, 1953: Spanish Moroccan whale oil production in 1953 totaled 80 metric tons, valued at 1 million pesetas (US\$24,000) to the producers, compared with the 1952 production of 147 metric tons, valued at 2 million pesetas (US\$48,000).



Sweden

DOLLAR IMPORT REGULATIONS LIBERALIZED: Sweden has liberalized its regulations regarding imports (including some fishery products) from dollar countries (among which the United States is included). The Swedish Trade and Industry Commission's announcement 200 of September 24, 1954, contains regulations on the liberalization of dollar imports as well as a list of commodities which will be liberalized effective October 1, 1954. Commodities included in the dollar-free commodity list may be imported without license under proviso that the country of origin of the commodity (i. e. the country where the commodity has been manufactured or produced) be any one of the countries or areas (the dollar area) listed in the Announcement and that the country of purchase of the commodity (i. e. the country where the commodity has been purchased or for sale or other purpose directly or via another country been shipped to Sweden) be either any one of those within the dollar area, or any one of the EPU countries, Finland, Indonesia, or Yugoslavia. Included among the dollar-free list of commodities which can be imported into Sweden from the dollar area without import license are the following:

Statistical Item Number of the Swedish Customs Tariff	Commodity
315-317	IV. Products of the foodstuffs industry, etc.
321:1, ex 321:2	Preserves of fish and shellfish
	Preserves of soups

Among the countries listed as belonging to the dollar area are the United States, Possessions of the United States in Central America (Puerto Rico, St. Thomas, St. John, Santa Cruz, the Panama Canal Zone, etc.), and Possessions of the United States in Oceania (the Marshalls, Guam, Hawaii, American Samoa, etc.).

The Commission on the same date also issued announcement 201 which contains regulations for the import of dollar goods via third countries or against "transit dollars." However, fishery products are not included in this announcement.



United Kingdom

LARGE-SCALE TEST OF FREEZING FISH AT SEA: An experimental project for freezing the first part of the catch on a trawler is being planned by the British White Fish Authority and the Distant Water Vessel Owners' Development Committee, with the technical assistance of the Torry Research Station. The conversion of an existing type of trawler is being planned. This joint project is explained in a report, Food Investigation 1953, by the Food Investigation Board of the British Department of Scientific and Industrial Research. The report deals with the work carried out during the year by the Food Investigation Organization on the handling and preservation of foodstuffs, and included is the work done at the Torry Research Station on freezing of fish at sea.

The report on the work of the Torry Research Station, signed by Dr. G. R. Reay, the superintendent, says: "Distant water trawlers rarely return to port with a full catch of fish because catching rates are not now high enough to enable them to do so without the risk that some of the catch may be condemned.

"Quick-freezing and storage of frozen fish at low temperatures is the only known method of preserving quality over long periods and of providing the trade with an ample supply of good fish. The problem is to apply this method in a way which is technically and economically sound.

"The full economic advantage of freezing will probably only become apparent when larger ships are built which can remain at sea appreciably longer and travel at more economic speeds. Nevertheless freezing the earlier part of the catch on existing ships must first be investigated."

A freezer which is more suitable than existing types for freezing gutted unfileted fish has been designed and tested on shore and on the station's vessel Keelby during the past three years. This experimental plant, the Torry vertical plate freezer, is now being developed commercially.

The pilot-scale plant on board the Keelby has been modified and installed in a top-loading insulated cabinet which is more convenient for operation at sea. This plant is undergoing engineering trials on shore and is being used to produce frozen fish for quality tests.

In connection with the full-scale joint project, the Torry Research Station has assisted in preparing a scheme for the conversion of an existing Arctic type of trawler to enable the first part of the catch to be frozen. Various possible layouts for different sizes of plants have been investigated, with the object of evolving a type of installation which occupies a minimum of the valuable stowage space while retaining complete operational convenience and flexibility.

Detailed records of the rates of catch, haul by haul, have been compiled during trips in recent years on distant-water trawlers. These have been analyzed to pro-

vide estimates of the amount of fish which would be frozen by various sizes of plants before the permissible delay between catching and freezing (determined by final quality) is exceeded. This analysis is required because of the delays necessitated by the considerable hourly fluctuations in the catching rate, and the variation of the daily average catch, especially near the beginning of the fishing period.

In this analysis and the planning of layouts, the experience of commercial fishing operations gained in recent years by our engineers has been invaluable. In planning the details of conversion and installation of plant and auxiliaries, assistance has been given by an experienced professional marine engineer employed by the White Fish Authority.

The influence of prefreezing treatment upon the quality of cod frozen at sea continues to be studied. "It appears that the same amount of care is required in gutting and icing the fish before freezing as has been recommended for normal handling on trawlers. Fish which has been iced for three days and then frozen and stored for some months at -28.9°C . (-20°F .) has proved to be of entirely satisfactory quality for 'freshing' and for smoke curing. Work in progress should determine how much longer than three days fish can be held in ice before freezing and still yield a reasonably satisfactory product. As already implied, permissible delay before freezing is an important factor in estimating the size of freezer to be installed on a trawler. Storage at low temperatures is essential to maintain quality in the frozen fish."

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PARTIAL LAY-UP OF TRAWLERS ENDS SEPTEMBER 11: The current 20-percent lay-up of British deep-water fishing trawlers ends on September 11, The Fishing News of August 13 announced.

This practice of partial lay-up in the summer months was first introduced last season as a practical step towards checking uneconomic and wasteful fishing in those months when consumption tended to decline with disastrous effects on prices and returns for fishing effort.

In spite of the reduced supply this effected, there still was almost 42 million pounds of good edible fish which could not find a market and had to go for meal.

This year the lay-up was originally planned to operate from April 19 to July 31 and was enlarged on the basis of last season's experience to 25 percent of deep-water vessels.

On June 25 it was announced that the proportion of lay-up would be reduced to 20 percent but that the period would be extended from August 1 to September 11 because of the market conditions then ruling. It was stated then the expectation was that the market would harden about that time. It was also revealed that figures showed that even during the period of the 25-percent lay-up the market had been reasonably supplied in relation to demand except on very limited occasions. In some periods, in fact, the market could not absorb supplies and quantities had to go for meal.

Fleetwood was included in the lay-up scheme this year for the first time, the other ports being Hull and Grimsby. Altogether 270 ships were affected--162 based at Hull, 90 at Grimsby, and 24 at Fleetwood.

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DEVELOPMENTS IN FISHERIES DISCUSSED IN THIRD REPORT OF WHITE FISH AUTHORITY: A welcome reversal of the downward trend in numbers of British near- and middle-water trawlers, as a result of the plans to promote the re-

building of the fishing fleet, is stressed in the third annual report of the White Fish Authority for the year ended March 31, 1954.

Results of an investigation into the costs and earnings of certain coastal wholesalers for 1952 showed that their net profits were less than in 1951.

These are the principal matters featured in the report.

Catch: The report says that while the weight of fish landed in 1953/54 (to March 31) was down by 7.2 percent compared with the previous year, the value decreased by no less than 10.4 percent.

The weight of fish landed by British vessels in 1953/54 was down by 4.3 percent, and the value by 5.4 percent, compared with the previous year. The weight of foreign-caught fish, however, decreased by 31.1 percent, and its value by 33.9 percent.

Distant-Water Fleet Bigger: As in previous years, the distant-water fleet, which is based mainly in Hull, Grimsby and, to a small extent, Fleetwood, provided about half the total weight of white-fish landings. There was a slight increase in the number of trawlers: 301 on December 31, 1953, compared with 292 in December 1952. Nine new vessels came into service and because of the high rate of building before and immediately after the last war the fleet remains, except for a very few vessels, a modern one. The weight of their catch was down by 7.5 percent and its value by 6.8 percent in comparison with the previous year.

Although the average ex-vessel price realized increased slightly from 42s. (US \$5.88) to 42s. 6d. (US\$5.95) per cwt. (112 pounds), the fall in production and gross receipts was serious. Many requisites of fishing and maintaining the fleet increased in price. The measures taken by the vessel owners themselves, and the fact that a large quantity of fish caught by the distant-water fleet failed to be sold in the fresh fish market, also points to the difficulties.

The Authority, however, still does not possess accurate knowledge of the costs and earnings of this section of the industry. After the Authority had stated in their Second Annual Report that it would be advantageous to have an up-to-date knowledge of the trading operations of

distant-water vessels, the British Trawlers' Federation offered voluntarily to provide the necessary information on every vessel in the group.

Lay-Up Policy: Regarding the trawler owners' action in laying-up vessels--they laid up 20 percent of the vessels and restricted the sale of a trawler's catch in the fresh fish market to 70 percent of its capacity--the report says:

"The effect on landings is not so great as may be supposed, because during the summer a part of the fleet is normally laid up for annual refit and overhaul, and because it is exceptional for a vessel of this class to land a catch much exceeding 70 percent of its capacity.

"The Trawler Owners' Committee took their action because supplies of distant-water fish, mainly cod and haddock, were greatly in excess of demand and, because they expected that this situation would continue. Indeed, during the summer, in spite of these restrictions on catching power and on landings, over 18,000 metric tons of edible fish remained unsold in the fresh fish market and were disposed of at unremunerative prices for salting or for reduction to fish meal. In October 1953, the period of the year when fish in general usually begins to be short, the lay-up provision was suspended, and was not resumed during the winter.

"Although the provisions of the Development Scheme may seem restrictive in their operation, and have incurred much criticism from both inside and outside the fish industry, the Authority does not consider that they have so far had a harmful effect on supplies or prices.

"It is true that, in addition to the regulation of catching and sales, the owners impose a minimum price, but this price, 4s. per stone (4 U. S. cents per pound) for cod, is below the estimated average cost

of production.

"In the Authority's view, no one can reasonably expect the owners to continue to catch more fish than the market can absorb and to sell large quantities at uneconomic prices."

Foreign Imports: On the question of regulating the imports of foreign-caught fish, the report recalls the Authority's recommendation that regulation of imports was desirable and their hope that a statutory scheme for regulating British landings (with which, under the General Agreement on Tariffs and Trade, a scheme for the control of imports must be associated) might be based on the Development Scheme.

"During the past year, there was an exchange of views between the Authority, the Fisheries Departments, and the representatives of the distant-water trawler owners.

"The Authority understands that the trawler owners are now elaborating their proposals with a view to further discussion.

"A solution of the problem is not easy: it will need to provide a financial return to British owners sufficient to ensure the proper replacement of vessels, to conform with the international obligations of the country, and at the same time to safeguard the continuance of supplies at reasonable prices to the public. But the Authority believes that regulation by a statutory body is far preferable, either to a return to unregulated conditions which may in time undermine the efficiency of the distant-water fleet or to restrictions imposed by the industry itself which are bound to arouse suspicion and mistrust."

Iceland Dispute: On the Icelandic dispute the report says the Icelandic claim that their new limits were justified by the decision in the Anglo-Norwegian case had never been accepted by H. M. Government, "who made repeated efforts in the course of the year to find means of resolving the dispute in consultation with the Icelandic Government. These efforts were unsuccessful, and H. M. Government eventually informed the Icelandic Government that they were unable to offer further sugges-

tions for the settlement of the dispute but that they would be willing to consider any constructive proposals that the Icelandic Government might feel able to put forward. The Authority understands that there have been no developments as between the two Governments since that time."

The ban on the purchase of Icelandic fish was strongly challenged in the autumn of 1953, says the report, by Mr. George Dawson, "a financier with no previous connection with the industry, who had entered into an agreement with the trawler owners of Iceland to distribute their fish in this country."

Between October 15 and November 19, seven Icelandic vessels discharged a total of about 1,400 metric tons of fish at Grimsby.

"Although a large number of merchants at port dissented from their Association's policy of upholding the ban, only one bought fish from the financier. The trawler officers, realizing that a refusal to sail would on this occasion embarrass the majority of merchants who supported them, undertook to continue to land fish on condition that it was not sold to merchants who bought Icelandic fish. The trawler owners for their part withheld supplies from the one merchant who bought Icelandic fish."

Subsequently, the financier withdrew from the field.

Fishing Limits: Regarding the proposal to extend British fishing limits, "strongly supported by the inshore fishermen, particularly those of Scotland," in accordance with the principles of the judgment of the International Court in the Norwegian dispute, the report says the fishermen continued to urge this course during the year.

"The Authority, who had previously conveyed the views of the fishermen to the Fisheries Ministers for their consideration, maintained the position that they could not press H. M. Government on the issue because of its wider implications. In December 1953 the Government announced that they had decided to make no change. While sympathizing with the inshore fishermen, they concluded that

wider considerations arising out of the naval, mercantile and deep-sea fishing position of this country and colonial territories must take precedence."

Near- and Middle-Water Fishing:

Dealing with the near- and middle-water fishery, the report points out that while the quantity of fish landed by near- and middle-water vessels decreased by 0.9 percent in comparison with the previous year, the value of the catch declined by 2.8 percent. The average ex-vessel price realized fell from 62s. 7d. (US\$8.75) to 61s. 6d. (US\$8.61) per cwt. (112 pounds). The number of vessels taking part in this fishing again declined markedly from 762 on December 31, 1952, to 713 a year later, a fall of 6.4 percent following a fall of 6.7 percent in the previous year.

However, during 1953, 10 new vessels came into service, a larger number than in any year since 1946.

The economic difficulties of the near- and middle-water fleet were again acute in 1953, but not so serious as in the previous year. The loss on the operations of the fleet as a whole, though still heavy, and the average loss per vessel, were considerably less than in 1952; and the proportion of profitable vessels, though not so high as in 1951, showed a recovery over 1952.

"The improvement may be attributed mainly to two causes. The more important one was the increase in the amount of subsidy received as a result of the addition from April 1, 1953, of a flat-rate payment. The other significant factor in reducing the net loss on the fleet's operations was an increase in the average catch per vessel; this in turn was due in part to a slight increase in the average number of days at sea, but was greater than could reasonably be expected from that cause alone."

Rebuilding the Fleets: Turning to the rebuilding of the fleet under the Government scheme of grants--entrusted to the Authority--which came into operation on August 11, 1953, the report comments that "the response of the industry was encouraging. By March 31, the Authority received 26 applications for grants for the construction of new near- and middle-

water trawlers. Since then four applications have been received."

Grants approved for near- and middle-water vessels, amounted on March 31 to £361,010 (US\$1,011,000). Almost every vessel for which a grant was payable also became the subject of a loan, and by March 31, the Authority approved loans amounting to £742,692 (US\$2,080,000) for 23 new near- and middle-water vessels.

"The Authority is satisfied that their arrangements for the making of grants and loans are expeditious. An application which is straightforward and for which full particulars are furnished by the applicant takes only about three to four weeks to go through."

More Conservation Needed: On the question of conservation and the decision of the Permanent Commission set up under the International Fisheries Convention of 1946, to fix the minimum size of mesh at 75mm. and 70mm. and 100mm. for seine nets, according to areas, which came into force on April 5, the Authority "again wishes to record their view that other measures of conservation will need to follow those now in force if the danger of over-fishing is to be effectively met."

Volume of Subsidy: In the financial year 1953/54, the subsidy given in respect of near- and middle-water vessels since July 31, 1950, amounted to £1,001,451 (US\$2,804,000) in England and Wales and to £652,145 (US\$1,826,000) in Scotland. The total of £1,653,596 (US\$4,630,000) compared with £1,161,748 (US\$3,253,000) in the previous financial year.

"The basis of payment on a sliding scale was maintained at broadly the same rates as during the previous year, but from April 1953, because of the economic difficulties of the near- and middle-water sections, Ministers decided to make an additional payment at a flat rate of 4d. (4.4 US cents) per stone (14 pounds) for gutted and 3d. (3.3 US cents) per stone for ungutted white fish landed by near- and middle-water vessels and sold for human consumption.

"The Authority and the Committee for Scotland and Northern Ireland received representations from trawler owners

and fishermen that the flat rates of subsidy should be payable also on edible fish which remained unsold in the fresh fish market. They contended that when boat owners failed to sell fish of good quality because of the state of the market, over which they had no control, they needed the subsidy more than when all their fish was sold.

"The Authority, after consulting the Advisory Council, concluded that the proposal was reasonable, and decided in January to give it their support."

Inshore Fishing Grants: The number of applications for grants by inshore fishermen to the Authority was extremely satisfactory. Between August 11, 1953, when the scheme came into force, and the end of the financial year at March 31, 1954, there were 96 applications for new vessels, and 99 for new engines. Since March 31, 15 more applications have been received for vessels and five for engines. Amounts of grants approved up to March 31 were: for fishing vessels, £92,206 (US\$258,177); and for engines, £21,594 (US\$60,463).

Only a small proportion of applications were rejected by the Authority, and nearly all of them were in respect of engines. The Authority considered in most of the cases that where the hull was old or defective the installation of a new engine could not be justified.

Inshore fishermen may obtain loans, as well as grants, for vessels and engines, and nearly all who receive grants apply also for loans.

Up to March 31 the Authority approved loans amounting to £156,526 (US\$438,273) in respect of 52 new inshore vessels, and to £35,527 (US\$99,476) in respect of 52 engines.

The Authority took a further step to encourage and support the inshore fishing industry by offering in March to make loans for the acquiring, in certain circumstances, of nets and gear to be used in vessels of not more than 70 feet in length. The loans may cover up to 60 percent of the cost, and are repayable within three years. The rate of interest at March 31 was $2\frac{7}{8}$ percent.

The white fish subsidy is paid also to inshore fishermen and amounted in the financial year ended March 31 to £202,998 (US\$568,394) in England and Wales, £404,302 (US\$1,132,046) in Scotland, and £16,904 (US\$47,331) in Northern Ireland. The total of £624,204 (US\$1,747,771) compared with £557,895 (US\$1,562,106) in the previous financial year.

What Fishermen Earn: The Authority continued its investigations into the costs and earnings of inshore fishermen.

The results show a fall in the earnings of the crews and in the net profits of English and Welsh vessels; on the other hand, the net profits of the Scottish vessels slightly increased. Inshore landings have gone up in the last two years. Since the sample was so small, only tentative conclusions can be drawn from the results, but it is clear that the subsidy has been a great help to the inshore fishermen in keeping their boats at sea.

Imports: Imports of white fish in the year ended March 31 were 67,861 metric tons, or 8.3 percent of the total supply; the percentage in 1952/53 was 11.1; in 1951/52, 16.3; and in 1938, 9.3. The imports in 1953/54 showed a marked drop from those of the previous year: in weight 31.1 percent, and in value 33.9 percent. The average value dropped from 86s. 1d. (US\$12.05) to 82s. 7d. (US\$11.56) per cwt. (112 lbs.).

The steepest fall was in "boxed fish," which is brought in by carrier vessels and consigned mainly to inland markets or retailers; here the decline was as much as 45.7 percent, in comparison with a decline of 11.8 percent in the fish landed directly from foreign fishing vessels.

To Help Exports: To encourage exports the Authority decided from December 1, 1953, to give financial assistance in the form of a rebate of the Authority's general levy paid on fish which is exported. Although the concession applies to all exports of white fish, it is likely to be of most significance for exports of the various kinds of processed fish.

"The Authority realizes that the effect of this assistance is limited, and

they would like to do more to increase sales outside the country. The subject was discussed during the year with several individual traders, some of whom, the Authority were glad to learn, had surveyed overseas markets, and with trade associations. The Authority intends to take the matter further with the industry."

Frozen Fish Scheme: The Authority's revised frozen fish scheme was based on proposals by the National Federation of Fish Quick Freezers.

"The rest of the industry, except the fish friers, objected to the scheme almost as strongly as to that of the previous year. Some disliked the Authority's engaging in trade, even in exceptional circumstances, and in particular their taking power to sell wet fish; others opposed the making of grants to one section of the industry out of the general levy; most of them considered that the scheme was unnecessary, and that adequate supplies of frozen fish would be produced without it.

"In view of these criticisms, the Authority considered modifications which would confine the scheme to the provisions of loans to quick-freezers for promoting the export trade in frozen fish or for the creation of a small reserve, and would limit the Authority's own purchases of fish for freezing to the smaller ports. The Authority is preparing a revised scheme for further consultation with the industry."

Canning Pilchards: Regarding the pilchard industry of Cornwall and Devon, the report says that while 1953 did not prove so difficult as was at first feared, the average price received by the fishermen for pilchards declined. "The Authority was glad to learn that, as a result of their representations, the Ministry of Agriculture and Fisheries would undertake a survey of the fishery, with the object of reducing the costs of catching and improving the quality of the catch. The Authority for their part intend to keep the marketing problems under close review. The provision of a fish meal factory for the Southwest will reduce the fishermen's fear of surpluses and encourage them to fish to the utmost capacity."

Surplus Sprats: The Authority again made arrangements for helping inshore fishermen dispose of their surplus catches of sprats. The Authority negotiated with reduction factories at Hull and Grimsby that they would accept consignments of sprats at a price of £9 10s. (US\$25.31) per metric ton, delivered at the factory. The Committee for Scotland and Northern Ireland made the same arrangement with a factory at Aberdeen, and also assisted the fishermen in securing a considerable reduction in the freight rates for the fish.

To Help Cooperatives: Under the plan of assistance to cooperative organizations, the Authority is empowered to encourage voluntary arrangements for the selling of white fish and for the buying of materials and other requisites, and to give financial or other assistance in bringing such arrangements into operation. The plan provides for grants and loans.

"The Authority trusts that this offer of assistance will lead to the establishment of more cooperatives among inshore fishermen; their area officers have been instructed to encourage and assist the fishermen in their formation. ..."

In May 1953, on the recommendation of the Committee for Scotland and Northern Ireland, the Authority approved loans to the Arbroath Fishermen's Association Limited amounting to 80 percent of the cost of acquiring a lorry, new fish boxes, and premises and plant for processing.

In November 1953, the Orkney Fishermen's Society were given a grant towards the administrative expenses in their first year of operation and were assured that the Authority would consider loans for specific purposes if they were later required.

Small Ports Scheme: Consultations were held during the year on the Authority's Small Ports Marketing Scheme, which would, they hoped, insure more stable prices for inshore fishermen and spread their earnings more evenly over the year. The proposals, which include prescribed minimum prices, a price stabilization fund, to be used to purchase fish unsold on the market, and its disposal

for freezing, salting or fish meal, were welcomed by the Scottish fishermen's associations and accepted by representative organizations in England and Wales.

Wholesalers' and retailers' associations offered no objection of principle, says the report.

After the consultations, the Authority revised the draft and has submitted it to departments for preliminary consideration in order to avoid delay.

General Aid: Trade and area officers of the Authority endeavoured to assist the inshore fishermen in every practicable way: by encouraging and organizing the formation of associations; by suggesting and demonstrating improved methods of packing and marketing; and by promoting easier and quicker methods of operating.

The Authority and the Committee for Scotland and Northern Ireland also discussed with certain local authorities and associations the marketing difficulties at their ports. The Authority also made representations to the appropriate authorities against actions which might inflict hardship on fishermen and fish traders.

The Committee for Scotland and Northern Ireland gave special attention to the marketing problems of Northern Ireland, whose fishermen have great difficulty in disposing of their catches, mainly consisting of whiting, at prices which bring them a reasonable return. In February the Committee met the Ulster Sea Fishermen's Association, and agreed to be represented in a working party which is to examine the problem and to submit a scheme to the Authority.

Problem of Containers: The coastal wholesalers asked the Authority to continue the provisions of the Minister of Food's Returnable Containers Order, which he was intending to revoke, and after consulting other sections of the industry they published their proposed Regulations in October, requiring a seller of fish to charge, and the buyer to pay, a deposit of at least 5s. (70 U.S. cents) per box on returnable containers of a capacity of more than one stone, the deposit

to be repaid on redelivery of the box in reasonably good condition.

A number of objections to the Regulations were received, mainly from the inland wholesalers who had long been opposed to the principle of a deposit charge and were anxious for fish to be dispatched in nonreturnable boxes. Ministers decided to confirm the Regulations, but only with modifications which provided for the gradual elimination of the deposit charge; it would cease to apply to all boxes after the end of the year, by which time the Ministers hoped that the Authority and the trade together might be able to work out a long-term box policy. The Order came into force on January 18.

The coastal wholesalers strongly opposed the modifications, which, they contended, made the deposit system impracticable to work or to enforce, and they pressed the Authority and Ministers to restore the Regulations to their original scope. The British Transport Commission said that to cover the consignment and redelivery of every box by appropriate documents would be very difficult and would slow down the return of the boxes; this in turn might hinder the distribution of fish from the ports. For these reasons the Authority decided not to recommend a return to the full scope of the Regulations and asked the coastal wholesalers to discuss what other methods were practicable of reducing their heavy costs in providing containers.

Profits of Retailers: During the year the Authority completed their investigation into the costs and earnings of fishmongers and fish friers. "But the number of traders who volunteered to cooperate by furnishing records of their transactions was so small in both sections that the samples could not be regarded as representative and to publish the results would be misleading." It was decided not to go on with these investigations until the Authority had obtained compulsory powers for the production of the necessary information.

Question of Merchants Profits: The Authority continued its investigation into the trading operations of coastal

merchants and inquiries made covered the year 1952. Because of the small number of merchants in the sample, the Authority points out that it is not representative of the coastal wholesaling trade generally. "The results, so far as they have value, show that the trading position worsened in 1952 in comparison with 1951, but was better than that of 1950."

Publicity: Regarding publicity, the report declares that "the biggest problem of the industry is to expand the demand for fish, and a large part of the Authority's revenue has been appropriated to publicity."

Press and display advertising were based on "The Whispering Fish," a little figure who has begun to be known and recognized.

Registering Retailers: For the registration of fishmongers and fish friers,

the federations and associations of retail traders "gave invaluable help to the Authority by dispatching notices and forms to their members, and wide publicity was given by the lay and trade press and by the B. B. C."

By March 31 the register contained the names of 11,347 fishmongers, occupying 14,709 premises, and of 10,719 fish friers, occupying 11,295 premises; at some 1,500 of these premises both a wet and fried fish business was carried on. "The registration of fishmongers could, therefore, be taken as reasonably complete, but it was clear that very many friers had still to register."

The Authority decided not to begin enforcement action for the time being, but to try out other means of communication through markets and trade suppliers which they hope will be successful.



Venezuela

FOREIGN-FLAG FISHING: Venezuela claims territorial waters extending three nautical miles offshore. She claims a contiguous zone of 12 nautical miles offshore "for exclusive purposes of vigilance, security, and protection of the national interest," according to the legal adviser of the Venezuelan Foreign Office.

By the national constitution adopted in 1953, Venezuela claims jurisdictional rights over the continental shelf off her shores. Legislation now under study and which may be presented to the next Venezuelan congress for enactment is expected to provide for the regulation of commercial fishing in waters over the continental shelf. There has been to date no official Venezuelan definition of the extent of the continental shelf, according to an August 26 U. S. Embassy dispatch from Caracas.

Under existing legislation the 3-mile Venezuelan territorial waters zone is reserved exclusively for Venezuelan-flag fishing vessels. The zone of 9 nautical miles lying beyond the 3-mile territorial waters is not stipulated to be reserved exclusively to Venezuelan-flag fishing vessels, but foreign-flag vessels are not permitted to fish within that zone. Theoretically, the Venezuelan Government could issue permits to foreign-flag vessels for fishing within that zone, but no request for such permit could be expected to be acted upon until Venezuela has enacted the proposed law regulating offshore fisheries.

In the absence of legislation to regulate the offshore fisheries, Venezuela currently exercises no control over fishing by foreign-flag vessels beyond the 12-mile line.

It is not contemplated that the proposed legislation to regulate the offshore fisheries will reserve the waters over the continental shelf for the exclusive exploitation of Venezuelan vessels, but rather that it will control commercial fishing in those waters for the purpose of protecting and preserving the fisheries. It is the intention at present to divide the waters of the continental shelf into zones, certain of which will be closed to fishing and others to be considered open waters where fishing may be carried on under prescribed conditions.

