International

FOOD AND AGRICULTURE ORGANIZATION

FAO SERVICES USED BY U. S. IN CALCULATING FOOD REQUIREMENTS: While it is generally true that most of FAO's services are given to underdeveloped countries, the more-developed countries also receive substantial benefit from membership in FAO, according to a news item from the National Conference of Nongovernmental Organizations on FAO.

One case in point is FAO's publication "Food Composition Tables for International Use," issued in October 1949. These tables have been adopted by the U. S. Department of the Army and are the basis for all food-value calculations for U. S. Government establishments in areas of military responsibility in Europe and the Far East.

* * * * *

REPORT ON EXPANDED PROGRAM OF TECHNICAL ASSISTANCE: The Food and Agriculture Organization has issued a report[1/] summarizing the progress and accomplishments of its technical assistance program from July 1950 to May 1, 1951. During the brief period (since October 1950) that technical assistance funds have been available, FAO has completed 7 projects and has initiated field work on 61 others. A large number of requests from governments have been examined from the standpoint of their technical and administrative feasibility and scheduled for operations. Duplication with bilateral and other technical assistance projects is avoided. By May 1, 1951, FAO had concluded 68 supplemental project agreements with 32 governments, calling for the provision of 226 experts and 159 fellowships. These approved projects, including essential administrative and supervisory costs, will involve an estimated total expenditure of the equivalent of US$4,117,757 out of FAO's allocations for the first and second financial period. In addition, 36 supplemental agreements with governments are currently under negotiation, calling for 136 more experts and 200 additional fellowships at an estimated total cost in 1951 and 1952 of US$1,675,100.

Among the numerous types of assistance requested by governments are included the following fisheries projects.

Fish Production and the Management of Fisheries Resources: The rational exploitation and conservation of inland, offshore, and deep-water fisheries resources including improvements in fishing craft, gear, and techniques will involve 17 experts and 4.2 percent of the funds. This activity will need to be expanded materially next year to meet the growing demand of governments for assistance in expanding their fisheries as a valuable source of high-protein food for low and medium income families.

1/ THIRD REPORT TO THE TECHNICAL ASSISTANCE BOARD ON THE ACTIVITIES AND PROGRESS OF FAO UNDER THE EXPANDED PROGRAM OF TECHNICAL ASSISTANCE FOR ECONOMIC DEVELOPMENT, MAY 1, 1951, (CL 12/7), 55 P., PROCESSED.

Processing and Marketing of Fisheries Products: Includes grading, standardization, prices and marketing margins, and the development of adequate credit resources for the fisheries industry. This will involve 8 experts and 1.7 percent of the funds. Some of these experts are being used this year on exploratory studies of the marketing problems involved and it is anticipated that governments will require a larger number of experts in this field in the months immediately ahead.

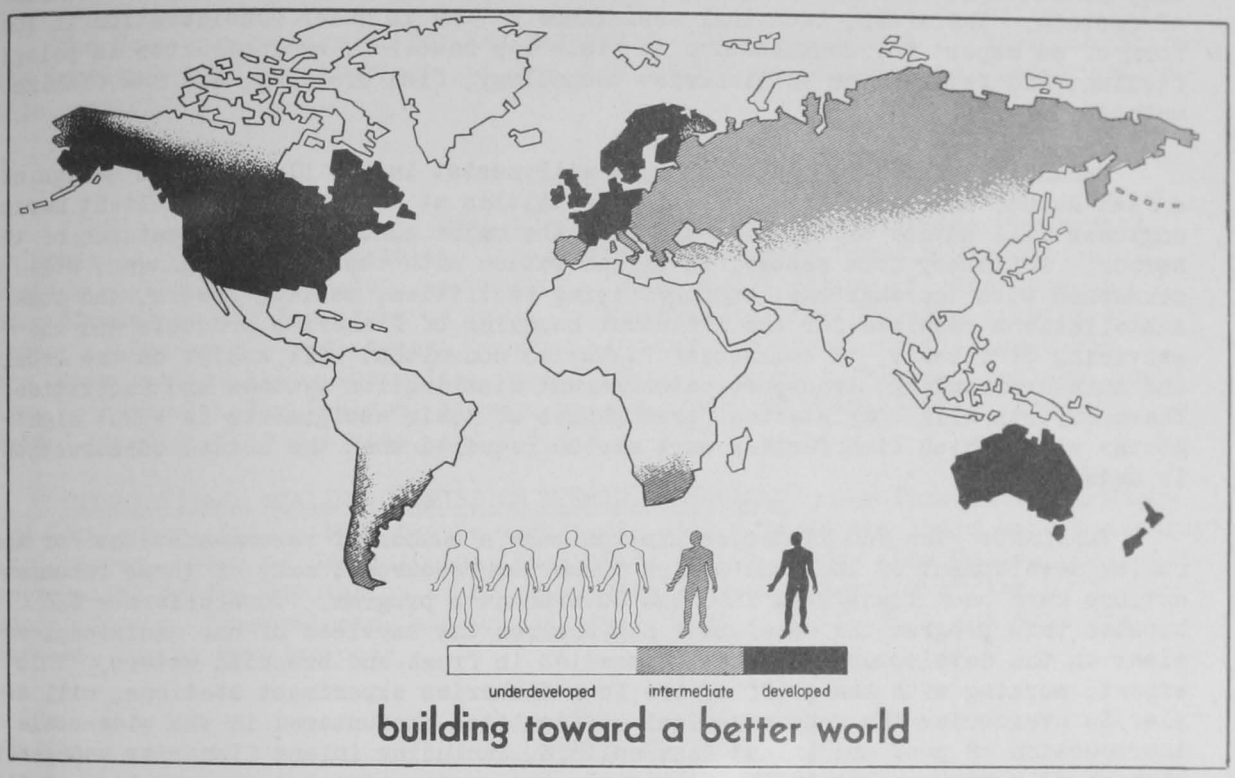
Summary of Technical Assistance Fisheries Activities by Countries: BRAZIL: The Government of Brazil in the interest of implementing its policy of economic and social development under the Salte Plan and related projects, has requested that FAO provide initially the services of twelve experts and three fellowships in forestry, agricultural technology, fisheries, and rural welfare. Because modernization of the fisheries in Brazil holds great potentialities for improving the diets and providing gainful employment for large numbers of the population, the Government desires the services of a fisheries expert to advise on its over-all program for the modernization of fishing equipment and on the development of fish preservation, processing, storage, and distribution. As the work of this fisheries adviser progresses, it is anticipated that a number of additional experts may be required to concentrate on particular phases of the development program.

CEYLON: This country is receiving a fisheries expert, qualified as a fishing craft and gear technologist to advise and assist on various phases of its fisheries development program. This program involves the conversion and mechanization of a large number of local fishing craft and the extension of trawling, drift netting, dory fishing, and pareja fishing in an effort to increase the productivity of the industry and to demonstrate improved fishing practices to local fishermen.

CHILE: An agreement in fisheries has been signed by the Government of Chile. Chile has an extensive coastline, rich in fisheries resources that have been only partially exploited because of inadequate scientific knowledge of the character and extent of these resources and because of a number of economic and technological obstacles to their efficient development. In an effort to expand and modernize its fisheries, the Government in collaboration with FAO fisheries officials has outlined a program for the systematic appraisal of the fisheries of Chile, including the initiation of several research and development schemes. In its initial stages this program will require the assistance of two fisheries experts, one a qualified fisheries biologist, who will help organize and conduct the inventory of the country's fisheries resources and formulate the research program. The second expert will study the economics of production, marketing, and consumption of fisheries products with a view to recommending improvements in handling methods, reduced costs, and a general increase in fish consumption. Aside from the many economic benefits to be gained from an expanded fisheries industry, the people of Chile have considered their fisheries resources a valuable source of high-quality protein food which could be made to contribute greatly to the achievement of a more balanced diet. The government will provide qualified men to work with these experts as well as the necessary vessels, gear, and crews for the marine survey.

ECUADOR: Since the potentialities of the fisheries industry of Ecuador have not been intensively explored, the first task of the two fisheries experts assigned to Ecuador will be to organize and initiate a program of survey and assessment of the marine fisheries resources, in both the mainland coast and Galapagos areas; to make recommendations for the regulation and rational utilization of commercial fish and shellfish resources on a sustained yield basis; to ascertain what improvements in the preservation, processing, storage, and distribution of fishery products are

necessary and practical; and to recommend economic and other measures for increasing domestic consumption of these important sources of protein food. The initial assignment of the fisheries experts is six months.



HAITI: FAO's technical assistance to the Government of Haiti is based in part upon the findings and recommendations of the United Nations Mission to Haiti in which FAO cooperated and upon several independent studies by FAO of the problems and potentialities of food and agricultural development in some of the decadent areas of the country. While these and similar studies clearly reveal the seriousness of the problems that must be overcome in the improvement and development of Haiti's agricultural, fisheries, and forestry resources, FAO has found it advisable to avoid the establishment of a large technical assistance mission in the country, but rather to supply a series of experts at various stages as the government proceeds with the implementation of its policy of rural development. One of the major recommendations of the United Nations Mission was to increase the supply of food, particularly protein, suited to the peasant taste and economy through the culture of fish in ponds, estuaries, swamps, lagoons, irrigation canals, etc., thus putting into use latent food-growing media and utilizing extensive unused swamp and lowland areas. As part of its regular program, FAO supplied a fish culture specialist to map out such a program. Following this, the Haitian Government appropriated $10,000 in 1950 and assigned two government technicians and a number of lay persons to initiate the program. Areas for nursery ponds and for demonstration and experimental ponds were set aside on grounds of the government experimental farm at Damien. One joint Government and private fish culture project has been initiated at Damien, and at least two others are contemplated. With assistance from other governmental agencies, ponds are now being constructed. FAO, under the technical assistance program, is extending its services on this project by providing a full-time fish culture specialist for a minimum period of one year, to supervise and develop the project. It also is giving a fellowship of six months' duration for the

senior Haitian officer assigned to the project to enable him to study fish culture practices in countries abroad where such practices are well advanced.

ISRAEL: Fisheries production in Israel is rated next in importance to field crop production, as the inadequate supply of meat makes fish an essential source of protein. Therefore, technical assistance by FAO is under consideration in the form of an expert for consultation in fisheries research, an instructor in pelagic fishing, and fellowships in fisheries technology, fish breeding, and new fishing methods.

PAKISTAN: Three fisheries experts will assist in the planning and design of a fish harbor and associated marketing facilities at Karachi. A consultant marine engineer will advise on the site and plan the major constructional features of the harbor. A fishery port master, in collaboration with the marine engineer, will be concerned with the wharfage, storage, icing facilities, selling floors, and other installations required for the efficient handling of fisheries products and the servicing of vessels. A commercial fisheries consultant will assist on the local and inland marketing, transport, storage, and distribution systems and facilities. These experts will complete the first phases of their assignments in about eight months after which time further work may be required when the actual construction is undertaken.

THAILAND: The FAO Fisheries Mission made a number of recommendations for the fuller development of Thailand's rich fisheries resources; many of these recommendations have been translated into the Government's program. To accelerate and broaden this program the Government now desires the services of one additional adviser on the development of inland fisheries in fresh and brackish waters. This expert, working with the staff of the four fisheries experiment stations, will assist in overcoming the many practical difficulties encountered in the wide-scale introduction of pond and inland fish culture, including inland fisheries management control of noxious weeds in inland waters, the propagation and distribution of fish fry, and other problems of inland and fresh-water fisheries. Four fellowships of three months each will be awarded for special studies of problems encountered in the program.

Regional Technical Assistance Activities: ASIAN FISHERIES TRAINING PROGRAM: One of the principal subjects under discussion at the Third Meeting of the Indo-Pacific Fisheries Council held in Madras, India, February 1-6, 1951, was ways and means of encouraging fishery training and education to make up for the lack of suitably trained personnel to assist in developing fisheries in the Indo-Pacific area. The Council recommended not only that governments take steps immediately to initiate and expand existing training projects, but also requested that FAO assist such governments as might be prepared to act as host countries in establishing regional training schools. Among the prospective schools or centers to accomplish the recommendations of the Madras Meeting are a regional training center devoted to teaching practical pond culture techniques and another center to be held later devoted to instructions in the operation and maintenance of vessels, motors, and fishing gear. It is anticipated that arrangements will be concluded early enough to permit the holding of one or both of these regional training centers in 1951.

LATIN AMERICAN FISHERIES TRAINING CENTER: The Second Latin American meeting on Food and Agricultural Programs and Outlook requested FAO to establish a fisheries training center in the region to help train qualified personnel in the biologic, technologic, and economic aspects of fisheries and related industries. The meeting visualized that such organized training in some Latin American country having the necessary facilities would help governments in their efforts to make greater use of these resources to satisfy the food requirements of their people.

At the invitation of the Government of Chile, preparations are being made to conduct this center at the Santamaria Technical University, Valparaiso. The center will run for about ten weeks beginning on January 6, 1952. Participating governments will pay travel and subsistence for one-half of their trainees and FAO, through its Technical Assistance Fellowships, will pay the expenses of the remainder.

The Economic Commission for Latin America, the Organization of American States, the Institute of Inter-American Affairs, and UNESCO are expected to cooperate in this project.

WHALING

JAPAN ADHERES TO INTERNATIONAL WHALING AGREEMENT: The Japanese Government, on April 21, 1951, adhered to the International Agreement for the Regulation of Whaling signed at Washington, December 2, 1946. Notification of adherence was communicated to the Secretary of State by the Minister for Foreign Affairs of Japan. Japan is the seventeenth country to ratify or adhere to the Agreement, the other parties being Australia, Brazil, Canada, Denmark, France, Iceland, Mexico, Netherlands, New Zealand, Norway, Panama, Union of South Africa, Sweden, United Kingdom, United States, and U.S.S.R.

INTERNATIONAL WHALING COMMISSION MEETING ANNOUNCED: The International Whaling Commission, established by the Agreement, will convene its third annual meeting in Capetown, Union of South Africa, beginning July 23, 1951. The United States is represented on the Commission by Dr. Remington Kellogg, Director of the U. S. National Museum, Commissioner, and Dr. Hilary J. Deason, U. S. Fish and Wildlife Service, Deputy Commissioner.

Australia

PEARL AND TROCHUS SHELL PRODUCTION, 1950: Pearl and trochus shell Australian production in 1950 was valued at £622,850 (US$1,388,956) as compared with £601,375 (US$1,768,043) in 1949, states the March 1951 Fisheries Newsletter of the Commonwealth Director of Fisheries. Approximately 70 percent of the 1950 production was exported to the United States and earned over $1,000,000 for Australia.

Pearl shell production in 1950 was 31 percent less in quantity and 6.3 percent less in value than in 1949. The main reason for this decrease was that Thursday Island producers diverted some of their pearling vessels to trochus fishing, and the pearl shell divers concentrated on an area which has been so extensively fished over the past four years that shell has become scarce. Weather conditions in 1950 also hampered Thursday Island operations.

Beche-de-mer production in 1950 was negligible.

Pearl shell prices per ton in 1950 averaged a third higher than in 1949--£506 (US$1,128) as compared with £373 (US$1,097), respectively. Pearlers, who for the past two years contracted with a New York City firm, have renewed the contract for three years on conditions satisfactory to all parties.

NOTE: VALUES CONVERTED ON THE BASIS OF THE FOLLOWING RATES OF EXCHANGE FOR THE AUSTRALIAN POUND STERLING: 1950 - £1 EQUALS US $2.23; 1949 - £1 EQUALS US$2.93.

SHRIMP GRADER: A new type of shrimp (prawn) grading machine--reported remarkably simple, compact, and easily cleaned--was successfully demonstrated on an Australian fishing boat at Pittwater (Sydney) in February this year.

The machine was invented by L. J. Allan, an engineer now living at Pearl Beach, who is also the designer of a compact-type winch for small fishing boats.

The essential feature of the new shrimp grader is a series of vibrating glass rods with tapered slots. The vibration of the rods (the machine is driven off the boat's engine) shakes the shrimp along them; the rods are arranged to sort out the shrimp into previously determined grades. All rejected shrimp are returned to the sea immediately. The shrimp going through the machine did not seem to be injured in the trial demonstration. The inventor decided on glass for the vibrating rods after experiments with metal rods had shown that for efficient grading no dirt or rubbish must adhere to the rods (glass rods are easily cleaned and, if necessary, can be "lubricated" with a bucket of water during the grading operation).

It is intended to manufacture the machine in three sizes, using stainless steel. The glass rods are replaceable individually. The medium-size machine will be only 3 ft. long, 15 in. wide, and 2 ft. 3 in. high, yet will be guaranteed to handle at least 200 pounds of shrimp an hour. The maximum capacity would be 350 pounds.

TUNA INVESTIGATION IN TASMANIAN WATERS: The clipper Senibua, having proved the effectiveness of live-bait pole fishing for tuna along the New South Wales coast, is now attempting to duplicate its success by this method of fishing in Tasmanian waters,

The Senibua is a tuna vessel owned and operated by a company which was organized to catch tuna in Fijian waters. This vessel made its first cruise in Australian waters early in October 1950. However, in pole fishing for tuna off New South Wales, the vessel was dogged by bad weather.

In mid-December 1950, the Commonwealth Treasury, on the recommendation of the Minister for Commerce and Agriculture, agreed to assist financially another month's exploratory fishing, with a rebate to the Government on all tuna taken. During this month fishing operations were supervised by a Technical Advisor of the Commonwealth Fisheries Office. Despite continued bad weather, the operations proved the efficiency of pole fishing, and sufficient tuna were taken to reimburse practically all of the expenditures.

Following this success, the Minister and the Treasury agreed to an extension of Commonwealth assistance on the same terms for another month. As the Tasmanian Government fisheries vessel Liawenee had been working on tuna and had been taking fish by trolling, it was decided to send the Senibua to Tasmania. The clipper arrived in Tasmania at the end of January 1951. Depending on the results in Tasmania, it is hoped that it may yet be possible to use the Senibua in another State as well.

Since the tuna schools come close to the coast, boats much smaller than California tuna clippers can be used for tuna pole fishing in Australia. Already several New South Wales fishermen have installed live-bait tanks for pole fishing.

Prospects of a big tuna industry along the southern half of the Australian mainland coast are considered good. In addition to providing many fishermen with

a good living, of special interest to Australia is the fact that a canned tuna industry will provide valuable dollar-earning exports.

NOTE: ALSO SEE COMMERCIAL FISHERIES REVIEW, FEBRUARY 1951, PP. 47-9.

Belgium

FISH FILLET PLANT: With Marshall Plan-financed freezers, a Belgium company is engaged in the quick-freezing of fish fillets in Ostende. This is the first and only company in Belgium to go into this business, declares a May 18 ECA news release. The plant, which has meant new life to the economy of this ancient North Sea fishing port, is capable of processing 125 metric tons of fish per day and producing 50 tons of fillets. It has a storage capacity for 2,000 tons of cellophane-wrapped fillets.

The four giant blowers required for quick freezing were obtainable only in the United States, and the Marshall Plan supplied US$24,000 for the purchase of these blowers. In addition, US$2,000 were supplied for the purchase of a cellophane packager from the United States.

* * * * *

IMPORT POLICY: Belgian importers are relatively free to buy goods from dollar areas and can usually secure the necessary dollar exchange for payment, according to word to the ECA Mission in Brussels. This means that American suppliers are permitted to sell almost any commodity to a Belgian importer, for which there is a market in Belgium.

In order to import, a Belgian firm secures an import license from any of the 2,000 banks or makes a so-called declaration "in lieu of license" and secures the necessary exchange. This payment system applies not only to ECA-financed imports but also to non-ECA dollar-financed imports.

Brazil

AMERICAN FIRM TO PROMOTE SHRIMP EXPORTS: A representative of an American frozen foods firm is seeking to establish a cold storage plant in Sao Luis, Brazil, and to promote the exportation of shrimp. Negotiations are in progress between the State of Maranhao, fishing vessel owners, and companies who have plant installations, an American Consul dispatch from Belem dated April 20 states. The installations now in existence are practically unused.

* * * * *

INTERNATIONAL CONVENTION FOR THE REGULATION OF WHALING RATIFIED: The Brazilian Legislative Decree No. 14, of March 9, 1950, ratified the International Whaling Convention and attached supplementary regulations, according to a May 5, 1951, report from the American Legation at Rio de Janeiro. The Brazilian instrument of ratification was deposited in Washington, D. C., on May 9, 1950. The Diario Oficial of April 24, 1951, published Decree No. 28,524 dated August 18, 1950, which declared that the Convention "be executed and fully observed."

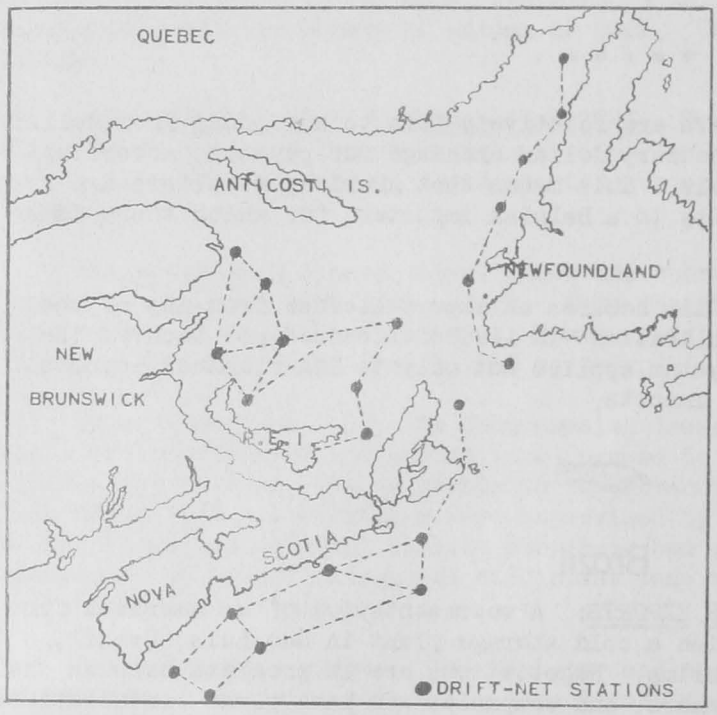
Canada

CANNED LOBSTER 1951 MARKET OUTLOOK: In discussing the market prospects for canned lobsters during 1951, Nova Scotian dealers have expressed the belief that prices for the 1951 pack will be at least as high as in 1950, according to an April 27 American consular report from Halifax. Reports indicate that the Canadian commodity is said to be getting heavy competition in the New York metropolitan area and the mid-western United States from rock lobster or crayfish from South Africa, Cuba, New Zealand, and Australia.

* * * * *

DRIFT-NET HERRING FISHING EXPERIMENTS ON EAST COAST: In line with a general plan of attempting to improve the efficiency of fishing on the east coast of Canada, the Atlantic Biological Station at St. Andrews, N.B., has been conducting experiments with drift-nets for catching herring and mackerel.

Drifting for herring is not new. It has been the most widely used and most successful method of capture in the North Sea since the earliest times. However, it has not been generally adopted by Canadian fishermen and these experiments were designed to test the effectiveness of the method in our waters and to determine the offshore distribution of herring during the summer months.



LOCATION OF DRIFT-NET STATIONS AND AREAS WHERE EXPERIMENTS WERE CONDUCTED WITH DRIFT-NETS FOR CATCHING HERRING AND MACKEREL.

The experiments were carried out from June 1 to November 12, 1950, in the southwestern portion of the Gulf of St. Lawrence, along the Nova Scotia coast from Canso bank to Roseway and off the west coast of Newfoundland. Good catches of both herring and mackerel were made in the southwestern Gulf from early June until the end of September but no appreciable quantities were taken at any time in the other two areas, the March 1951 Trade News of the Canadian Department of Fisheries reports.

A fleet of 12 gill nets was used; each net being approximately 40 yards long and 25 feet deep. Nets of $1\frac{1}{2}$, 2, $2\frac{1}{2}$, and 3 inches stretched mesh were included in the fleet. The nets were set just before sunset and hauled back immediately after daybreak.

Very few herring were taken in the $1\frac{1}{2}$- or 3-inch nets. The 2-inch nets were most effective in the American bank, Orphan bank, and Bradelle bank areas and the $2\frac{1}{2}$-inch nets in areas north and south of the Magdalen Islands and off the north shore of Prince Edward Island. The 3-inch caught more than 85 percent of the total weight of mackerel taken.

The main interest of the investigation was to explore the areas as thoroughly as possible and, to do this, a network of 22 stations was established. Sixteen of

these stations were occupied during three cruises in the southwestern Gulf and along the Nova Scotia coast, but only one cruise was made along the west coast of Newfoundland where the other six stations were located. Only one night was spent at each station during each cruise regardless of whether good catches were made or not.

The largest catch was made on June 5 on LeFond Georges about 12 miles southwest of the Magdalen Islands, where 6,000 pounds of herring and 3,000 pounds of mackerel were taken. At five of the stations, catches in excess of 5,000 pounds were made. The total catch for southwestern Gulf Stations was slightly more than 42,000 pounds for 22 sets, an average of 1,920 pounds per set. The largest catches are equivalent to average catches in the North Sea with about ten times as much net, and must be considered very encouraging.

Plans are being made to continue these explorations during the 1951 season. It is hoped to have a greater coverage of the Gulf and the more shallow areas off the Nova Scotia and west Newfoundland coasts. It is also planned to test other sizes of gill nets and to have the nets rigged in a similar manner to those used commercially in the North Sea.

The stocks of herring on the Atlantic coast constitute one of Canada's major unused fishery resources. Fishing is carried on, mainly, during a short spawning season of from three to six weeks duration. The herring are, at this time, in their poorest condition, and are suitable only for bait, for low grades of pickled herring, and for reduction to oil and meal. If sufficient quantities of high-grade herring can be located and caught throughout the summer and early fall months, it is not inconceivable that a fat herring industry will develop here similar to that which has been carried on for many years in Western European countries.

WHITEFISH INSPECTION COMPULSORY: Canadian Government inspection of whitefish for export became compulsory on May 16. The new whitefish inspection system has been carried on for some months on a voluntary basis to enable the industry generally to accustom itself to the new procedures. This also allowed the Canadian Department of Fisheries a training period for its inspection personnel in the practical application of the new regulations.

Buyers of Canadian whitefish have found that application of the regulations, during the voluntary period, resulted in a uniformly higher quality product reaching the export markets in the United States. Exporters taking advantage of this service have had their shipments facilitated through United States border points.

These new regulations, to ensure that only the highest quality of whitefish products continue to be prepared for export, resulted from a close study of the problem by the provincial governments concerned, the fishing industry itself, and the Canadian Department of Fisheries.

* * * * *

NEWFOUNDLAND FISHERIES OUTLOOK "NOT SO BRIGHT": In a speech on May 9 in which he presented the new 1951-52 budget estimate to the Newfoundland Assembly, Premier Joseph Smallwood stated that the future of Newfoundland's fisheries was "not so bright," according to a May 17 American consular dispatch from St. John's. He added that the Government was endeavoring to combat a postwar decline in this field through loans to private industries for the enlargement of plants so that fresh-frozen fillets for export might be substituted for salt cod.

New plants were expected to be set up soon at Placentia, Grand Bank, and Gaultois. Owners of plants at St. Anthony and Bonavista were being urged to double their capacity.

The Premier outlined a ten-point plan for fisheries expansion program, wherein more unionization and cooperation between fishermen themselves and the government would be possible.

The Premier earlier in the year called in some 200 fishermen delegates from all parts of Newfoundland in an effort to have them organize and deal realistically and efficiently with their own and market needs.

* * * * *

NEWFOUNDLAND SALT COD SALES TO EUROPE: Dollar payment for the sale to Europe of C$4,000,000 worth of Newfoundland's 1951 salt cod production has been arranged by the Canadian Government, a May 18 American Embassy dispatch from Ottawa states. Purchases of this product by Spain, Portugal, Italy, and Greece will be paid in pound sterling to the Canadian Government. The Canadian Treasury will pay the Newfoundland shippers in Canadian dollars. Under this plan, the sterling will be applied against Newfoundland's debt to the United Kingdom, which the Canadian Government took over at Confederation in 1949.

Under a similar plan for 1950,[1/] the limit permitted was C$6,000,000, but sales for that year only amounted to about C$4,000,000, the same amount proposed for this year. Canadian Government officials stated that this 1951 amount will cover between 35 and 40 percent of the Province's salt-cod production.

This continued arrangement is only a temporary solution to the problem of disposing of the Newfoundland fish production pending a Government reorganization of the fisheries now being worked out. Under this reorganization, new filleting and freezing plants are contemplated.

1/SEE COMMERCIAL FISHERIES REVIEW, AUGUST 1950, P. 42.

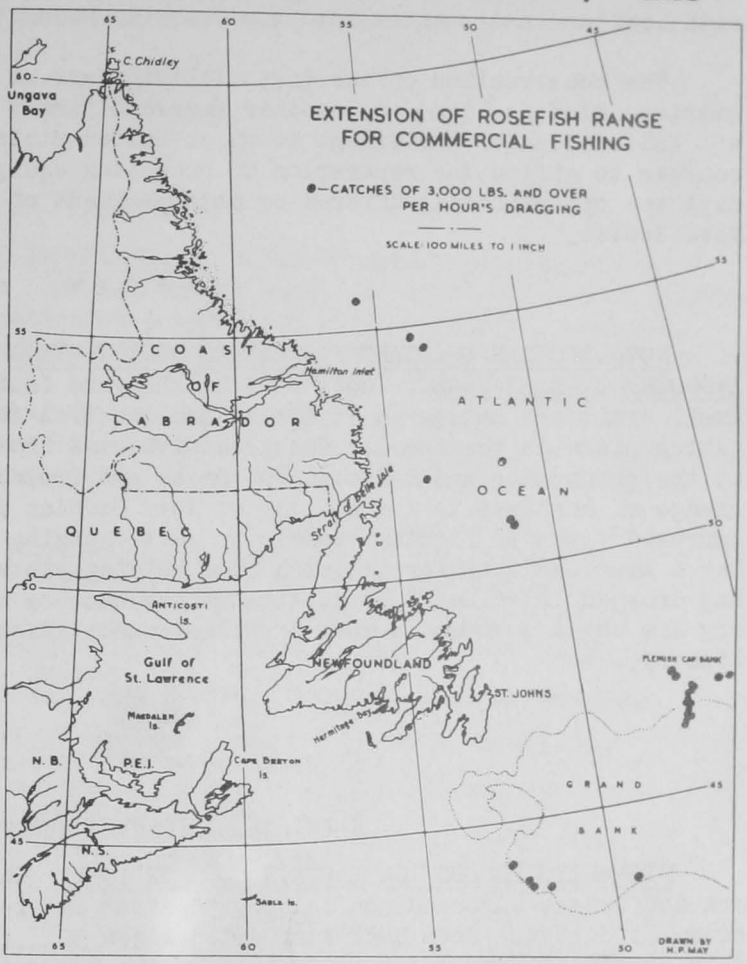
* * * * *

NEW ROSEFISH GROUNDS IN ATLANTIC: Exploration by the Fisheries Research Board of Canada of 1,000 miles of deep water, extending from the northern part of the Grand Bank northward to the latitude of Cape Chidley at the northern extremity of Labrador, uncovered in 1950 new rosefish (ocean perch) grounds for Canadian fishermen, the Canadian Fisheries Department Trade News of January 1951 announced.

This discovery by biologists of the Newfoundland Biological Station aboard the exploratory vessel Investigator II increases by 600 nautical miles the known range in which rosefish can be caught in sufficient numbers to make commercial fishing profitable.

Excellent catches were made with the vessel's small otter trawl. Much larger catches could be taken with the bigger nets of the commercial trawlers. The net used by the Investigator was a No. 36 otter trawl with a 60-foot headrope and an 80-foot footrope. Usually about 450 fathoms of towing warp were used in all depths of 150 fathoms and over, while the ratio of 3 to 1 was maintained in lesser depths. A good deal of the Investigator's efforts was directed toward deep water between 100 and 200 fathoms.

Known catches of rosefish per hour's drag ranged from 3,000 pounds to 20,000 pounds. On one occasion the trawl net broke with the weight of the fish. This catch, which was lost, was estimated at 30,000 pounds. Since the Investigator was exploring new depths, it did not remain to fish continuously in the areas found suitable.



Good stocks of rosefish were found at the Flemish Cap Bank and in most areas fished from the north-eastern edge of the Grand Bank to near Hamilton Inlet Bank. These northern rosefish are much larger than those to the south of the bank and the big catches were of large fish of excellent commercial size.

Before last year's explorations, the known availability of rosefish extended only to latitude 44° 30'. The commercial range for this fish is now extended northward to 55° 21', more than 600 nautical miles and about 11 degrees of latitude. A few rosefish were found in deep water as far north as latitude 60° 30'.

During the spring of 1950, explorations revealed large catches of rosefish on the southwest edge of the Grand Bank especially at depths of about 80 to 85 fathoms. These rosefish were, however, too small for present-day commercial use in Newfoundland, although they are as large as those used in the United States. Fish caught in the northern limits of the rosefish grounds were taken from a greater depth than those farther south. On the southern part of the Grand Bank it was sometimes possible to catch large quantities of rosefish in 80 to 90 fathoms. In Hermitage Bay, on the south coast of Newfoundland, fish were caught in quantity at 140 fathoms. On the northeast edge of the Grand Bank and Flemish Cap the favored depths are from 150 to 190 fathoms with the best catches at 160 to 190 fathoms. Off Labrador the fishing depth for the best catches was as much as 200 fathoms. Catches taken at depths less than these were considerably smaller.

* * * * *

NOVA SCOTIA EXPANDS FROZEN FISH PRODUCTION: The present trend of the Nova Scotian fishing industry is away from salt fish to the production of fresh and frozen fish for export, principally to the United States, and for sale on a broadening Canadian market, states an April 27 American consular dispatch from Halifax. This trend appears to derive partly from the chronic instability of traditional sterling markets in the Caribbean region and partly from gradual realization that the Province's prime competitive advantage lies in nearness to the currently most

productive fishing grounds in the western Atlantic, a geographic location turned to greatest commercial advantage by emphasis on quality production, especially with Newfoundland's entry into the Canadian Federation.

The construction of the $4.5 million plant at Louisburg by a Canadian and an American fishing firm, and another American firm's development at Petit de Grat are indications of the extent to which United States firms with sufficient resources to afford the renovation of operating equipment have been prepared to accept the opportunities offered by establishment of branch fishing operations in Nova Scotia.

* * * * *

NOVA SCOTIAN SHIPYARD FACILITIES CONTRIBUTING TO DEVELOPMENT OF FROZEN FISH INDUSTRY ON EAST COAST: Nova Scotian shipyard facilities for construction of small craft are making an important contribution in a considerable shift which is taking place in the eastern Canadian fisheries from the production of salt fish to the production and marketing of fresh and frozen fish. An element in this change of emphasis is the ability of Nova Scotian industry to develop and construct improved types of fishing vessels to meet changing standards and requirements, a May 4 American consular dispatch from Halifax states. The staple salt cod trade has dropped in value of production mainly because men and equipment in this fishery are being devoted to more profitable activities, such as the fresh halibut fishery.

China (Communist Mainland)

FISHERIES PRODUCTION TARGETS SET FOR 1951: The second All-China Marine Product Conference adjourned on January 30 after an 11-day session, states an American consular dispatch from Hong Kong dated March 30. (The report points out that the data presented are almost entirely from the Communist party platform.) The conference decided that efforts shall be exerted to restore the prewar annual production level of 1,500,000 metric tons within a period of two years. The 1951 production target was set at 1,100,000 tons or about 21 percent above the 1950 output of 911,000 tons.

Production targets for 1951 by regions are: East China region 500,000 tons; Central South region 360,000 tons; Northeast region 140,000 tons; Hopei and Tientsin Municipality 100,000 tons.

* * * * *

GOVERNMENT LOAN FOR FISHING INDUSTRY: The Chinese Ministry of Agriculture and the People's Bank of China have recently released a loan of JMP ¥80.9 billion (US$2,895,368) to the fishing industry for 1951, an American Consular dispatch dated April 20 from Hong Kong reports. (This report points out that the data presented are almost entirely from the Communist party sources.) The loan will be issued to the following sources:

1. ORGANIZED FISHERMEN AND THOSE ENGAGED IN RAISING FRY AND POND FISH.
2. FISHERMEN IN NEED OF FINANCIAL ASSISTANCE FOR GEAR REPAIRS.
3. STATE-OPERATED MARINE-PRODUCTS COMPANIES, AND MARINE-PRODUCTS TRANSPORTATION AND MARKETING COMPANIES.

4. PROCESSING, MARKETING, AND TRANSPORTING MERCHANTS AND DEALERS.
5. PRIVATELY-OPERATED FISHING VESSELS.

NOTE: MONETARY CONVERSION FACTORS: JMP ¥4,750 IS EQUAL TO $1 HONG KONG, WHICH IS EQUAL TO 17 U.S. CENTS.

Colombia

FISHERY PRODUCTS PROHIBITED IMPORTATION: A new Colombian exchange-control system instituted by Decrees Nos. 637 and 638 of March 20, 1951, effective immediately, also prohibits the importation of a long list of commodities, including fishery products, the U. S. Department of Commerce reported in April. The list of prohibited imports will be subject, however, to modification by recommendation of the newly-created Exchange Regulation Board, as conditions warrant. The following lists the fishery and allied commodities prohibited importation, as established in decree No. 638 (follow the classification of the Colombian customs tariff):

TARIFF NUMBER	DESCRIPTION
19	FRESH FISH (ALIVE OR DEAD) OR FISH PRESERVED IN A FRESH STATE BY REFRIGERATION OR OTHER METHOD: (B) SALT-WATER FISH
20	SIMPLY SALTED, DRIED OR SMOKED FISH
21	CRUSTACEANS AND MOLLUSKS, FRESH, SIMPLY COOKED OR SALTED: (A) LOBSTER, CRABS, CRAYFISH, SHRIMPS AND OTHER CRUSTACEANS (B) OYSTERS, CLAMS, SNAILS AND OTHER MOLLUSKS
119	CAVIAR AND CAVIAR SUBSTITUTES
120	PREPARED AND PRESERVED FISH OTHER THAN THAT INCLUDED IN ITEM 20: (A) IMPORTED IN BOXES, CROCKS OR HERMETICALLY SEALED CONTAINERS: (1) SARDINES (2) OTHERS (B) IMPORTED IN OTHER FORMS
121	PREPARED AND PRESERVED CRUSTACEANS AND MOLLUSKS OTHER THAN THOSE INCLUDED IN ITEM 21
957	NATURAL CORAL, WORKED (A) UNMOUNTED (B) MOUNTED
958	TORTOISE SHELL: (B) ARTICLES OF TORTOISE SHELL
959	MOTHER-OF-PEARL: (B) ARTICLES OF MOTHER-OF-PEARL
980	ROD-FISHING SUPPLIES
981	ORDINARY BUTTONS FOR WEARING APPAREL AND FOR DECORATION: (A) OF COAL, TORTOISE SHELL, IVORY, AMBER OR JET (B) OF MOTHER-OF-PEARL

The new exchange-control system initially sets a new exchange rate of 2.50 pesos per United States dollar (buying rate) and 2.51 pesos per dollar (selling rate) by the Bank of the Republic for all foreign exchange payments. The stamp tax on exchange transactions is 3 percent, which results in an effective selling rate for exchange for general importations of 2.585. Decree No. 637 provides that, with the exception of articles prohibited by the Government, exports and imports of merchandise may move freely. However, all exports and imports will require prior registration in the Office of Exchange Registration, and proof of registration will be required for the legalization of shipments by Colombian Consulates and for entry through the customs. A guarantee deposit of 10 percent of the value of each import registration is required, and a receipt for this deposit is a prior requisite for registration. Imports and exports which require prior authorization of a Ministry will continue subject to this requirement.

Costa Rica

FISHERIES TRENDS, 1950: No data are available on Costa Rican production of fishery products, but reports indicate that the amount is rather small.

Exports: Shipments (actually re-exports) of frozen tuna to the United States, the sole receiver, amounted to 4,486 metric tons in 1950, valued upon entry into Costa Rica at US$980,000, according to an American Embassy dispatch from San Jose dated April 5, 1951. The 1950 tuna exports were greater than those reported in 1949 (4,101 tons, valued at US$888,000).

No information is available on the total tuna pack in Costa Rica but 64 tons, valued at US$88,000 were exported chiefly to Venezuela and the Canal Zone in 1950 as compared to 68 tons, valued at US$97,000, sent chiefly to the same destinations in 1949.

Also, 3.6 metric tons of shark livers, valued at US$2,500, were shipped, all to the United States, as compared with 42 tons of shark and fish livers, valued at US$41,000, in 1949. These shipments are believed to be re-exports as practically no livers are known to have been produced in Costa Rican waters.

Exports of live turtles amounted to 91.6 metric tons, valued at US$3,980, as compared to 89 tons, valued at US$6,400 in 1949.

Fishing Regulations: Rules and regulations for the fishing industry now in effect appear satisfactory to the fishing fleet operating out of Costa Rica, which consists almost entirely of foreign vessels. This fleet utilizes the facilities of Puntarenas, the only fishing port in Costa Rica.

Territorial Waters: In December 1950 Costa Rica's highest court ruled that the country's sovereignty extends only to the internationally accepted three-mile limit.[1/] The legality of legislation which extended protection over a 200-mile offshore belt has not yet been submitted to the courts nor has that legislation been clarified.

1/SEE COMMERCIAL FISHERIES REVIEW, FEBRUARY 1951, PP. 51-2.

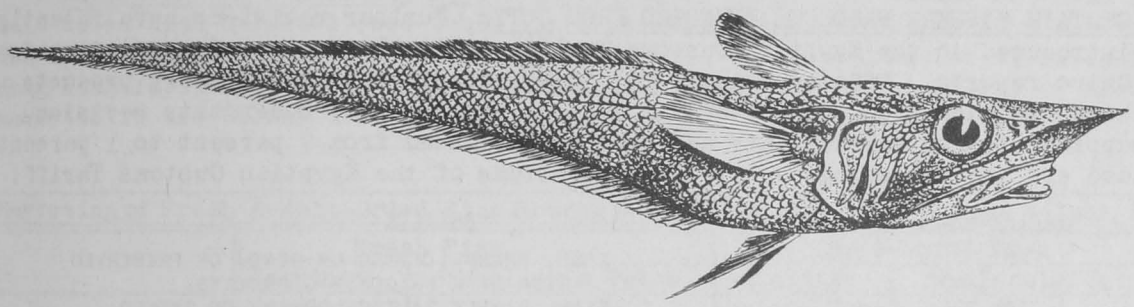
Denmark

DEEP-SEA TRAWLING INVESTIGATION EXPEDITION: A Danish elaborately-equipped deep-sea scientific expedition has reported trawling operations at a depth of 15,000 feet (2,500 fathoms), according to the March 1951 issue of the South African Shipping News and Fishing Industry Review. With modern equipment designed to plumb the greatest depths, these deep-trawling operations were carried out between 150 and 200 miles southeast of Durban, South Africa, and are reported to have produced remarkable results. Progressively lesser depths were trawled as the vessel (the Galathea) worked stations nearer to the African coast. Specimens, which may be new to marine science, were secured from this area, which is believed to have never been fished before.

The specimens consisted of a number of eels up to four feet in length and two small bottom fish (among the rarest known to marine biologists). The eels had been obtained from the greatest depth fished to date by this expedition, and at a depth from which eels had never before been obtained. The two bottom fish (small, pale,

queer-shaped, a creamy white in color, and without eyes) were rated the most valuable scientific specimens taken up to this stage of the expedition. There are ten known specimens of the one type and it is thought there may be five of the other yet both specimens were brought up in the same trawl.

Also from the same area, the expedition caught the largest complete specimen of a deep-sea squid which has been obtained. Scientists aboard consider it three times larger than any specimen at present in their possession. A huge, red deep-sea prawn nearly nine inches in length was also brought up.



RATTAIL-TYPE OF FISH TAKEN IN DEPTHS OF 5,000-6,000 FEET OFF THE WEST AFRICAN COAST BY THE GALATHEA. THESE FISH ARE BOTTOM FEEDERS.

The primary object of the Galathea's deep-sea expedition is to carry out research work in the unexplored deep waters of the world. To this end Danish scientists have devised special equipment which would enable them to trawl at more than 35,000 feet (5,833 fathoms) below the surface.

Over one-third of the world's surface is covered by water more than 12,000 feet (2,000 fathoms) deep and is still a virtually unexplored area. Below 24,000 feet (4,000 fathoms) nothing is known and it is in these areas that the expedition is seeking its principal field of operations. The greatest depth in which they hope to operate will be in the 36,000-foot "hole" in the area of the Philippines for which a specially designed cable would be shipped out to Singapore. In the Indian Ocean it was not thought likely that operations below the 15,000-foot level would be undertaken.

The Galathea expedition, which is scheduled to call at 66 ports scattered all over the world will take about two years but it will be several years probably before the scientists complete a report of their findings.

From Durban the Galathea will work up the Mozambique Channel. The deepest areas are being sought as the vessel slowly makes its way across the Indian Ocean towards the Pacific where it will operate in the greatest depths. The expedition is due back in Denmark in the latter part of 1952.

* * * * *

FISHING CUTTERS FOR MEXICO: Negotiations in regard to the export of Danish fishing cutters to Mexico in order to assist the latter country to build up its fleet are under way, according to a report in the April 13 issue of Dansk Fiskeritidende. The vessels involved are of wood and of large size.

* * * * *

U. S. MARKET SOUGHT FOR FROZEN FILLETS: The Union of Danish Fish Fillet Factories (Sammenslutningen of danske Fiskefiletfabriker) is attempting to develop a market in the United States for high quality frozen fish fillets, such as cod and flounder. The fillets would be packed in 1- or 5-pound cartons with quantities available depending on the catch, according to an American Embassy dispatch from Copenhagen.

The Union is an association of 18 Danish producers of fish fillets whose principal objective is to promote the export of Danish fish products.

Egypt

CERTAIN FISHERY PRODUCTS EXEMPTED FROM DUTY: Further revisions have recently been introduced in the Egyptian Customs Tariff, a May 11 American Embassy dispatch from Cairo reports. Effective April 26, 1951, certain imported fishery products have been exempted from payment of the regular customs duty under this revision. The supplemental ad valorem duty has also been reduced from 7 percent to 1 percent. Included are the following tariff classifications of the Egyptian Customs Tariff:

TARIFF NO.	ARTICLE
15	FISH, FRESH (LIVING OR DEAD) OR PRESERVED FRESH BY A FRIGORIFIC PROCESS.
16	FISH, SIMPLY SALTED, DRIED, OR SMOKED.
117	FISH, CRUSTACEANS AND MOLLUSCS, IMPORTED IN TINS, JARS, FLASKS, OR HERMETICALLY SEALED CONTAINERS:
	(A) FISH:
	(1) SALMON
	(2) SARDINES
	(3) TUNNY
	(4) OTHER, INCLUDING PILCHARDS AND HERRING, ETC.

However, canned crustaceans and molluscs imported into Egypt are still subject to duty.

German Federal Republic

ELECTROSTATIC SMOKING OF SARDINES: A German firm in Lübeck has announced its intention to place a device for the continuous electrostatic smoking of sardines on the market within a few months, according to the February 1951 issue of Konserves, a Danish canning periodical. This announcement was made a few months after the second of these cookers had been installed by a Danish firm for treating clupeid fishes packed raw in cans. The smoker is meant to be assembled immediately after the cooker.

Greece

DUTY-FREE IMPORT PERMITTED FOR FISH OILS: As a result of the small crop of olive oil this year, and in order to keep prices of olive oil from rising further, the Greek Government has taken a series of measures. Included among these measures is one that will permit the duty-free import of edible seed oils and fish oils, intended for the requirements of the Greek State, until August 31, 1951, reports the Canadian periodical Foreign Trade, dated February 17.

Hong Kong

REVIEW OF THE FISHERIES, 1950: Marketing of Fish: The amount of fresh and salt-dried fish marketed (see table) in Hong Kong increased during 1950 and there was a considerable export of fish fry, an April 4 American consular dispatch from Hong Kong reports. The increase was mainly in fresh fish. The amount of fresh fish marketed in the Colony during 1950 was 51.8 percent greater than in 1949.

Marketing of Fresh & Salt-Dried Fish in Hong Kong (Quantity & Wholesale Value), 1951

	Fresh Fish			Salt-Dried Fish		
	Quantity	Wholesale Value		Quantity	Wholesale Value	
	Metric Tons	HK $	U.S.$	Metric Tons	HK $	U.S.$
1950	16,425	24,414,750	3,875,357	16,304	13,873,411	2,202,129
1949	10,822	17,689,028	2,776,927	16,109	18,740,370	2,941,973

Practically all of the fresh fish and forty percent of the salted and dried fish is consumed locally; the remainder goes to China.

The main types of fish landed in Hong Kong are mackeral, shad, anchovies, lizard fish, golden thread, croaker, and yellow croaker.

There was also an export during 1950 of 880,090 fish fry valued at HK$64,115 (US$10,177). The fry are brought in from the East River in Kwangtung to Hong Kong where they are packed in hermetically-sealed 4-gallon cans for further shipment to Malaya, Thailand, and Formosa.

Most of the wholesale marketing of the local fish caught is done by the Fish Marketing Organization, with the exception of pond and shellfish. The Organization collects the fish in depots in the fishing villages and transports them in launches to the markets. A charge of 6 percent of the wholesale price is made to cover the costs of handling and marketing. It is hoped that this enterprise will eventually be taken over as a cooperative undertaking by the fishermen.

Fishermen and Fishing Fleet: It is estimated that during 1950 about 60,000 persons were engaged in the fishing industry, which is essentially owner-operated. Junks and sampans are the major types of boats used. Since the typhoon season from July through September compels wind-driven craft to tie up, there is a strong motive for mechanization. This was reflected in an increase of mechanized vessels in 1950 from 55 to 111. This increase was particularly seen in the native types of boats, such as the wooden long-liners and the fish collectors. Even the smaller boats, such as the purse seiners, are obtaining small engines suitable for their craft.

The Government is also lending a hand in the process of developing a new vessel based on present types which will be adaptable to motor power. A Colonial Development Grant has been obtained to cover the necessary research required to design a vessel, similar to a junk, which will be capable of self-propulsion.

NOTE: ALSO SEE COMMERCIAL FISHERIES REVIEW, MAY 1950. P. 66.
VALUES CONVERTED ON THE BASIS OF HK$6.30 = US$1.00 FOR 1950; AND HK$6.37 = US$1.00 FOR 1949. (THESE EXCHANGE RATES ARE THE AVERAGE OF THE HIGH AND LOW PREVAILING EXCHANGE RATES FOR EACH OF THESE YEARS.)

Iceland

FOUR OF TEN NEW TRAWLERS BEING BUILT BY BRITISH SHIPYARDS DELIVERED: Four of the ten new trawlers ordered by Iceland in British shipyards in 1948 have now been delivered. The remaining six trawlers are expected to arrive before the end of the summer, reports a May 29 American consular dispatch from Reykjavik.

Eight of the ten trawlers, including the four already delivered, are steam-powered. The other two will be Diesel-powered. The steam trawlers are similar to a number of trawlers which were delivered to Iceland from the United Kingdom in 1947-49. The new steam trawlers are 198' 9" long, 30' broad, 16' deep, and of about 700 gross metric tons. They have two holds for fish, totaling 18,190 cubic feet. They are fitted with seven fuel-oil tanks, totaling 235 metric tons; three Diesel-oil tanks, totaling 18 tons; ten water tanks, totaling 70 tons; and four fish-oil tanks totaling 32 tons. They have triple-expansion main engines rated at 1,000 h.p. at average speed, and 1,400 h.p. maximum. Diesel auxiliaries consist of two units of 120 h.p. each and one unit of 30 h.p. The vessels are fitted with modern radio equipment, echo sounders (two units each), and radar.

Each trawler is fitted with fish-meal and herring processing equipment, capable of reducing 25 metric tons of raw material daily--they are the first Icelandic trawlers to have fish-reducing equipment. Each trawler has living accommodations for 38 persons.

They are expected to operate with a crew of 32-33 when fishing for fish to be delivered fresh abroad, or for fish to be delivered in Iceland for quick-freezing or for reduction into meal and oil; when fishing and salting the catch for delivery in Iceland, the crew will number 38-40 persons.

One of the new steam trawlers, Olafur Johannesson, recently ran successful trials off Aberdeen, Scotland. It is of modern design with a forecastle, raked stem, flared bow, cruiser stern, and streamlined fin and rudder, and has a large fish room with a cooling plant.

There is a quick-freeze plant and insulated cold storage compartment where filleted fish are frozen and suitably wrapped in a paper covering ready for distribution ashore. The steam fish-meal plant is capable of handling 25 tons of fish offal in 24 hours. A separate compartment is allocated for the stowage of this fish meal. A cod-liver oil plant consists of five boilers in a house aft and it is fed by a hopper at the cutting ponds. Provision is made for the stowage of 32 tons of liver oil.

Deck equipment includes a steam trawl winch carrying two 1,000-fathom warps, electric windlass, and electric and hand hydraulic steering gear controlled from the wheelhouse by a telemotor. Two lifeboats fitted aft operated by mechanical davits are also part of the equipment.

Radar and other navigational aids, including wireless and two echo sounders are installed. Mechanical ventilation is provided for the 38-man crew. The vessel is propelled by means of a triple-expansion engine, developing 1,200 i.h.p. and uses superheated steam.

NOTE: SEE COMMERCIAL FISHERIES REVIEW, APRIL 1951, P. 58.

Indonesia

FISHING FLEET EXPANSION PLANNED: "Second in importance (to Agriculture) is the problem of greatly declined fish production," the newly-appointed Indonesian Minister of Agriculture stated in a press interview early in May, states a May 16 American consular dispatch from Djakarta. "To raise fish production," he continued, "our fishing fleet will be expanded with 300 boats, partly to be imported from abroad and partly to be constructed by Indonesian ship-building industries. With this increase it is hoped that Indonesian production of fish for home consumption will be raised each year. There were 40,000 fishing perahus in Indonesia before World War II, compared with only about 25,000 at present."

* * * * *

SEA-FISHERIES EXPANSION PROGRAM STARTED: The expanded Indonesian sea-fisheries program is now expected to show steady progress with the arrival of the first two of 20 fishing boats purchased from Japan with ECA funds. Reports indicate that fish production will be stepped up 300-400 metric tons annually, according to an April 17 American consular dispatch from Djakarta.

NOTE: SEE COMMERCIAL FISHERIES REVIEW, APRIL 1951, PP. 58-9.

Japan

AGRICULTURE, FORESTRY, AND FISHERIES LOAN LAW ENACTED: The Japanese Fisheries Agency, Ministry of Agriculture and Forestry, has advised the Natural Resources Section that the Agriculture, Forestry, and Fisheries Loan Law (Law No. 105 of 1951) and the Agriculture, Forestry, and Fisheries Loan Special Account Law (Law No. 106 of 1951) were enacted by the Diet March 31, 1951. Both laws became effective April 1, 1951, states the April 7 Weekly Summary of SCAP's Natural Resources Section.

Under the provisions of Law No. 105, the government may, within budgetary limits for each fiscal year, lend funds on a long-term basis to individuals or juridical persons for specified improvement projects in agriculture, forestry, and fisheries. In regard to fisheries the loan funds will be available for repair of fishing ports and for construction, repair, or purchase of facilities to be utilized jointly by fishermen. Loans for fishing port repair will involve interest rates of 6-7 percent, and are obtainable on a 15-year term basis. Loans to fisheries cooperatives for fishing ground development in Hokkaido, and for ice-making and freezing facilities also may be obtained on a 15-year term, at 7-8 percent interest.

* * * * *

COASTAL FISHING FLEET REDUCTION PLAN BEING REALIZED: During April this year the Japanese Fisheries Agency announced that the planned reduction in the coastal fishing fleet, part of the five-point proposal for rationalization of the fishing industry, would be accomplished through national indemnification of large numbers of trawlers, declares a May 14 American consular report from Tokyo. The agency an-

nounced that after April no new trawlers would be licensed; in the next five years approximately 17,100 of a total of 35,000 trawlers would be withdrawn from fishing operations.

It is estimated that owner indemnification would total about ¥8,060,000 (about US$22,390), and that approximately 500,000 persons including family members, would be displaced vocationally. This program would effect the trawler fleet only, and as yet is still in the planning stage, no money having been appropriated for the plam and no formal legislation submitted.

EAST CHINA AND JAPAN SEAS TRAWLERS DISCIPLINED BY GOVERNMENT: The Fisheries Agency in April ordered a ten-day cessation of operations by some 800 trawlers fishing in the East China and Japan Seas. The halt was called because of a recent large increase in the number of violations of the so-called MacArthur Line, beyond which Japanese fishing vessels are not permitted to operate, and the Agency believed that this action was necessary as a disciplinary measure.

Although the restriction was opposed by representatives of the fishing industry, the Agency stood firm, indicating the Government's concern over increasing friction between Japan and neighboring countries over Japanese violations of area limits established by SCAP.

* * * * *

FISH-LIVER OIL INDUSTRY, 1950: Production: The Japanese Ministry of International Trade and Industry (MITI) estimates fish-liver production, chiefly from shark, cod, tuna, and bonito, totaled 1,160 metric tons in 1948; 3,100 metric tons in 1949; and 12,620 metric tons in 1950, a May 11 consular dispatch from Tokyo points out. From the raw fish livers Japan produced 131 metric tons of oil in 1948; 1,176 metric tons in 1949; and 3,957 metric tons in 1950.

Japanese F.O.B. Export Prices of Fish-Liver Oils

Potency (U.S.P. XIV)	Low	High	Average
..(Units Per Gram)..	(Per Million Units in U.S.$)		
5,000 down	.055	.105	.0871
5,000 up	.06	.115	.0828
10,000 "	.07	.1175	.0876
20,000 "	.0772	.0975	.0912
30,000 "	.0675	.095	.0875
40,000 "	.09	.1025	.0952
50,000 "	.0975	.105	.1016
60,000 "	-	-	.09
70,000 "	-	-	.1125
80,000 "	.1125	.12	.1171
90,000 "	.102	.1175	.1105
100,000 "	.095	.125	.1177
110,000 "	.095	.1275	.1172
120,000 "	.1162	.1225	.1179
130,000 "	.10	.105	.102
140,000 "	-	-	.1175
150,000 "	-	-	.1250
200,000 "	-	-	.1425

MITI estimates that abou 70 metric tons of fish-liver oil were consumed in 1950 for the production of approximate 10.5 metric tons of concentrates with an average potenc of 100,000 U.S.P. per gram.

Production Potential: The Japan Vitamin Oil Industry Association states that 1950's fish-liver collection of 12,620 metric tons is considered a maximum production with Japan's present organization for collecting fish livers. MITI reports that actual capacity for fish-liver oil production amounts to 18,000 metric tons a year, although only one-fifth of this capacity is in operation at present.

It is roughly estimated by MITI that producers could process approximately 210 metric tons of fish-liver oil a year in the manufacture of concentrates.

Obstacles to Production Expansion: According to both MITI and the Japan Vitamin Oil Industry Association, there are three major obstacles to production expansion: poor organization in the collection of fish livers, present limitations on fishing areas, and the size of the catch of fish.

Domestic Requirements: Domestic consumption of fish-liver oil is small, it being estimated at less than 500 metric tons a year. The greater part of the oil is exported. The consumption of fish-liver oil for the manufacture of concentrates is about 70 metric tons a year, but demand is increasing and is expected by MITI to reach 120 metric tons in the near future.

Exports to the United States: According to MITI statistics, Japan in 1950 exported 196 metric tons of shark livers as such, and 3,600 metric tons of fish-liver oil to the United States. The Ministry estimates that the same volume of exports will continue in 1951 and 1952, if no unfavorable situation arises. Statistics of Japan's exports of fish-liver oil concentrates are not available.

Japan is exporting fish livers to the United States only. Almost all of Japan's fish-liver oil exports are also taken by the United States. In 1950, four metric tons of fish liver oil were exported to Sweden, Norway, and Western Germany.

Export Prices: Japanese f.o.b. export prices for shark livers ranged from US$0.35 to $0.40 per pound in December 1950. Export prices of fish-livers in December 1950 are shown in the table on page 70.

Quality of Products Being Exported to the United States: The strength of the fish-liver oil being exported to the United States ranges from below 5,000 U.S.P. to 200,000 U.S.P. units per gram.

NOTE: SEE COMMERCIAL FISHERIES REVIEW, AUGUST 1950, PP. 46-8.

* * * * *

SENATOR WARREN G. MAGNUSON DISCUSSES JAPANESE FISHERIES PROBLEMS: U. S. Senator Warren G. Magnuson held meetings with representatives of SCAP's Natural Resources Section on April 8 and 11 to discuss various aspects of Japanese fisheries, reports that agency's April 14 Weekly Summary. In particular, proposed fisheries agreements between Japan and the United States, which are expected to be concluded after the general peace treaty with Japan is signed, were discussed.

At the first meeting, representatives of the Japanese Fisheries Agency and the fishing industry were introduced to the Senator. In a later meeting, members of the Japanese fishing industry stated their willingness to support the proposed fisheries agreements as outlined in the letter dated February 7, 1951, to Ambassador John F. Dulles from Prime Minister Shigeru Yoshida.

SIXTH AND SEVENTH MOTHERSHIP TUNA EXPEDITIONS: Main elements of the sixth Japanese mothership-type tuna expedition to the waters adjacent to the U. S. Trust Territory of the Pacific left Japan April 10-13.

The expedition is a small one designed to operate for only 30 days. This fleet will be attached for administration and control purposes to the fifth expedition now operating in the area.

The sixth expedition consists of the mothership, the 500-gross ton Tenryu Maru; a carrier, the Tosui Maru; one patrol vessel; and eight catcher boats. Two dory-catchers are carried to and from the fishing grounds on the deck of the mothership.

The expedition expects to operate in the vicinity of 03° N. latitude and 157° E. longitude. The period of operation will be from about April 22 to May 22, 1951.

Estimates are that about 1,300,000 pounds of tuna, spearfish, and sharks will be caught and returned to Japan for domestic consumption. As no quick-freezing equipment is available it is unlikely that any of the products will be suitable for export purposes.

Reports indicate that another expedition was being prepared for departure early in June. This is the seventh expedition since May 11, 1950, when the Commander-in-Chief Pacific and U. S. Pacific Fleet and the High Commissioner Trust Territory of the Pacific Islands, and SCAP permitted strictly supervised fishing for tunas by Japanese mothership expeditions in defined areas north of the Equator. This expedition, which is expected to operate at sea for 3 or 4 months, will consist of a 10,000-metric-ton mothership which will freeze the catch, and about 25 catcher vessels. About 700 fishermen and other workers will accompany the fleet.

Mexico

CANADIAN SHIPYARD COMPLETED SIX OF ELEVEN MEXICAN SHRIMP DRAGGERS: The first six of eleven 58-ft. shrimp draggers being built by a Nova Scotian shipyard for a shrimp firm in Matazlan, Mexico, were completed and the delivery voyage commenced early in April, according to a May 4 American consular dispatch from Halifax, Canada. The C$350,000 contract was awarded the Canadian shipyard through a United States brokerage firm which, according to recent press reports, had been requested by the Mexican company to supply a fleet of vessels in an attempt to put Mexican shrimp production on an industrial basis.

Specifications for the Mexican draggers are summarized as follows:

LENGTH, 58 FT; BREADTH, 16-1/2 FT; HEIGHT (DEPTH UNDERSIDE OF DECK), 6-1/2 FT; TONNAGE, 39.19 TONS.
CONSTRUCTION: KEEL--BIRCH; HULL--BIRCH; PLANKING--SPRUCE; DECK--SPRUCE.
DECKHOUSE (FLYING BRIDGE ON ROOF): OF 3/4" PLYWOOD, PLACED WELL FORWARD TO LEAVE AFTER END FOR DRAGGING OPERATION AND FISH HOLD; CONTAINS BRIDGE AND COMPANIONWAYS TO ENGINE ROOM AND CREW'S QUARTERS BELOW DECK.
FISH HOLD: INSULATED WITH GLASS WOOD, LINED WITH GALVANIZED SHEET IRON, WHICH IS COATED WITH WHITE CEMENT.
MAIN ENGINES: HEAVY DUTY, DEVELOPING 85-100 B.H.P. AT 450 R.P.M.
AUXILIARIES: 6 H.P. DIESEL MARINE.
WINCHES: TRIPLE-DRUM HOISTS POWERED BY TAKE-OFF FROM MAIN ENGINES.
PROPELLERS: MANGANESE BRONZE, 42" DIAMETER BY 30 PITCH.
SHAFTS: COLD-ROLLED STEEL, SERVED WITH COTTON TAPE AND TALLOW, AND BOUND WITH MARLIN.
FUEL TANKS: TWO, GIVING EACH BOAT TOTAL CAPACITY IN EXCESS OF 1,500 IMPERIAL GALLONS.

* * * * *

GUAYMAS SHRIMP INDUSTRY FACES NEW DIFFICULTIES: During the first part of the year, 15 to 18 Guaymas boats (including 4 freezer boats) were fishing in the Salina Cruz area, according to a May 7 American consular report from Guaymas, Mexico. One of these freezer boats has already packed and frozen approximately 110 tons since leaving Guaymas in early March, while two other freezer boats have stored an additional 25 tons of packed and frozen shrimp in a period of three weeks of operation.

An April 11 Mexican newspaper report stated that several operators had decided to tie up their boats, since further shrimp fishing was deemed uneconomical and the

catch didn't consist of the same type as caught in past years. A shrimp-plant official stated that additional shrimp boats may be removed from fishing, and plant owners were talking of closing the season as of the end of May.

The financial status of the industry was made more critical when the banks virtually stopped all credit to the shrimp industry. The shrimp packing and freezing plants are seeking aid from the Mexican Government. Three plants have solicited loans from the Financiera Nacional, which has sent an auditor and consulting engineer to make a complete investigation and report of the shrimp industry. A prior survey was made in April by a commercial investigator of the Bank of Mexico. Should the Financiera grant long-term loans of the amount requested, it is reported that the plants would be deprived of much of their present independence and possibly of the freedom of negotiating with U. S. firms directly in the distribution and sale of shrimp products.

The industry on April 24, 1951, made a second appeal to the President of Mexico to give it relief from the high Mexican export tax on shrimp but no word has been heard as yet of the outcome of the audience granted them.

New Guinea

TECHNICAL ASSISTANCE REQUESTED FOR TWO FISHERY PROJECTS: In order to develop fishing projects, two companies in New Guinea have requested technical assistance from the Australian Ministry of Commerce and Agriculture, reports that agency's February 1951 Fisheries Newsletter. In January this year Australia sent an Assistant Technical Advisor to New Guinea for a period of about three months.

One company, located on Kwato Island, two miles west of Samarai, Papua, stated that it plans to develop fishing, not only to improve the natives' diet, but also in order to produce canned fish for export to the United States. This company reports that if a cannery is established, it may be owned cooperatively with the natives. It plans to use the profits to purchase rice-growing and bag-making machinery and for the benefit of the natives. Australia has already sent this company materials for making a 150-ft. lampara net, surface gill nets, bottom grab-all nets, and long lines. In addition, the company is outfitting a 52-ft. ketch with which it intends to begin exploratory fishing. The possibility of developing a crayfish or spiny lobster fishery will also be investigated.

The Advisor took with him a small otter trawl of his own make with which he hopes to do some experimental trawling. He plans to operate the net with the winch over the stern of the ketch.

The second company which requested technical assistance, located in Port Moresby, hopes to produce and export crayfish or spiny lobster tails, fillets, and canned fish.

Norway

HERRING FACTORY SHIP TO FISH OFF MOROCCO: The Norwegian herring oil and meal factory ship Clupea and four purse seiners will depart for Morocco in mid-June to engage in the sardine fishery off that coast, according to the May 9 issue of Fiskaren, a Norwegian trade periodical. The purse seiners, which range up to 100 feet in length also will carry trawl gear in order to test this method of fishing.

Panama

FEES INCREASED FOR BAIT-FISHING VESSELS: The Panamanian Government on April 27 signed a new decree (No. 150) making certain changes in Decree No. 108 of January 18, 1950, regulating bait fishing in Panamanian Pacific coastal waters, reports an April 30 American consular dispatch from Panama City.

Henceforth, bait-fishing vessels in excess of 150 tons will pay an annual license fee of US$1,500 instead of US$1,000. Most of the boats are reportedly of the 150-ton class. Fees for smaller boats are increased about the same proportion. Beginning in 1952, the bait-fishing season will run from March 15 to November 30 of each year, instead of as heretofore from April 15 to December 31; but during the current season, fishing will be permitted from April 28, 1951, to January 14, 1952.

NOTE: ALSO SEE COMMERCIAL FISHERIES REVIEW, APRIL 1951, P. 63.

Ryukyu Islands

REHABILITATION OF THE FISHERIES: Levels of rehabilitation for Ryukyuan fisheries, following the destruction of their productive capacity during World War II, have been determined by diet requirements of the island population for fish, their principle source of animal protein foods. In addition, exports of marine products are projected in an amount sufficient to pay for imported fisheries supplies necessary to maintain production. An annual production of 50,000,000 pounds is projected as the required level of development for food and export.

Reconstruction is being accomplished through the importation of fishing gear, ice plants, vessels, and vessel construction and repair supplies. These are imported chiefly from Japan and conform to specifications and types which can continue to be replaced from Japanese sources. Imports are sold into the local economy and all costs involved in translating these into productive units are paid for by the individual enterpriser in each case. Credit-financing facilities are provided to assist in placing capital-type production units into operation. Both GARIOA dollars and foreign commercial credits are used to support import purchases.

Earliest rehabilitation efforts involved the utilization of such World War II stocks as were surplus to the needs of the Military Occupation. These consisted of salvaged military landing craft (LCMs and LCVPs), life-raft fishing kits, and such other items as local ingenuity could fashion into fishing equipment, regardless of efficiency. Replacement and incorporation of standard-type equipment into the industry is being accomplished as rapidly as supplies become available. Capital-type facilities recently placed into operation consist of 65 fishing vessels totaling 2,400 gross metric tons and 7 ice plants with a daily capacity of 15 tons each.

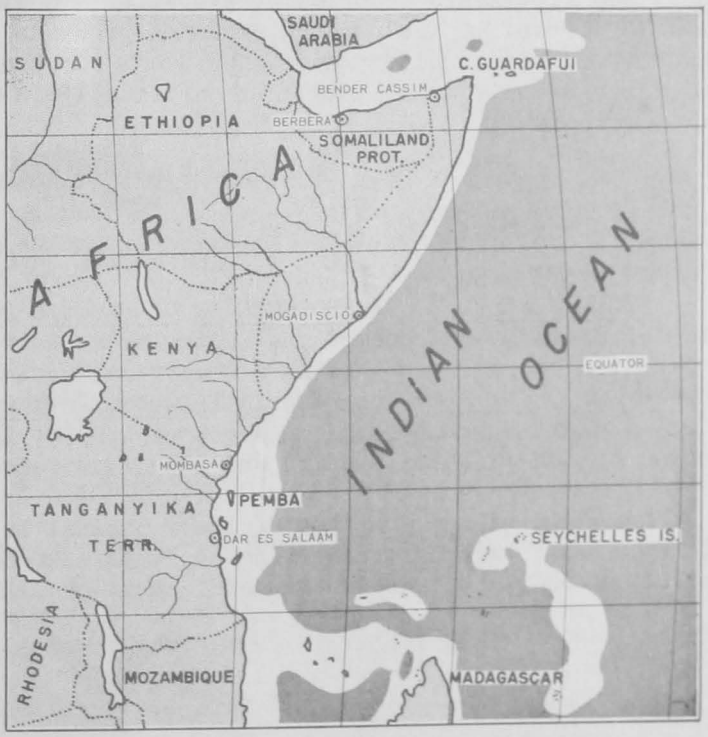
Shipyard facilities, capable of accommodating fleet requirements, are nearing completion, chiefly, through the use of salvage and surplus materials. A primitive foundry has been fashioned out of salvage materials which gives one yard a capacity for manufacturing most spare parts for hot-bulb marine engines up to 25 horsepower, as well as many vessel fittings.

Fisheries management, on a Central Government level, is in the development stage. The Fisheries Bureau of the Ryukyuan Food and Agriculture Organization, under supervision of Civil Administration, will perform management and development functions. Fisheries regulations will be patterned after prewar Japanese regulations for the Ryukyus area. Shortages of fishing gear in the early years of rehabilitation were such that exploitation offered little threat to abundance levels. A wider dispersal of fishing effort will be required, however, before the ultimate level of production can be realized. This will require the development and adoption of more efficient fishing, processing, and marketing methods.

--By Elmer Quistorff, Chief
Fisheries Division, Food and Agriculture Section,
U. S. Civil Administration of the Ryukyu Islands

Seychelles Islands

FISHERIES DEVELOPMENT PROGRESS REPORT: The Colonial Development Corporation of Great Britain has announced that its "Seychelles Fisheries" scheme has had a successful beginning.[1/] This organization is a commercial undertaking financed by an interest-bearing loan from the British Government, an April 11 American consular dispatch from Mombasa, Kenya, states. The loan is administered by the Colonial Development Corporation.



The activities of this concern will offer employment to local residents and supplement the salt-water fresh fish supplies if and when required. This organization hopes to find their main markets on the East African mainland and apparently in the United Kingdom.

More and more ocean-going fishing craft are being attracted to the Mauritius-Seychelles fishing banks. Two additional ships are to be added to the Colonial Development Corporation's Indian Ocean fishing fleet. It was reported that this agency's vessel Silhouette landed 60 metric tons of fish on its first cruise in the Seychellois waters, while two other private trawlers in the same fishing waters were not as successful. The Colonial De-

1/SEE COMMERCIAL FISHERIES REVIEW, FEBRUARY 1949, P. 62.

velopment corporation is constructing a base for its operations on St. Anne Island in the Seychelles group.

Spain

NEW ORGANIZATION PROMOTES CANNED FISH EXPORTS: An organization was recently formed in Spain, with headquarters in Santander, to promote the export of canned fishery products from the four coastal provinces of Oviedo, Santander, Vizcaya, and Guipuzcoa, states an April 18 American consular dispatch from Bilbao. It is believed that the new export drive is to be particularly aimed at promoting exports to the United States and elsewhere in the dollar area. The new group export body, called Export Operation CP3 (Conservas de Pescado 3), is stated to be the third such Spanish organization to have been formed within the past few weeks. Operation CP1 is said to cover the Galician area, and CP2 the South Atlantic provinces. All of these groups are apparently patterned after and are rather similar to Operation M1 which was formed in June of 1949 for the promotion of exports from the Province of Guipuzcoa.

Several persons connected with Operation CP3 have indicated that they formed the new organization because they believed that by grouping together in a more or less informal body such as the present one, fish processors and exporters would not only be able to sharply step up their exports, but would also be in a much more favorable position to ask the appropriate governmental authorities for necessary supplies, such as oil, which exporters in the past have frequently complained have hitherto been distributed in wholly inadequate amounts. Furthermore, the participants are reportedly accorded a favorable rate of exchange and to be allowed to retain 20 percent of the foreign exchange proceeds of their sales abroad for the purchase of needed machinery and other items for their own use, and particularly for the purchase of tinplate, which is habitually in short supply.

South-West Africa

PEARL ESSENCE TO BE PRODUCED ON COMMERCIAL SCALE: A Johannesburg firm has installed machinery at one of the factories at Walvis Bay, South-west Africa, for the production of pearl essence on a commercial scale, the March 1951 issue of The South African Shipping News and Fishing Industry Review reports. This factory will now be able to utilize some of the hundreds of tons of fish scales which formerly were wasted by the pilchard canning and reduction factories in the area.

Pilchard scales, because of their unusual lustre, are ideal for the manufacture of pearl essence. After the fine crystals have been extracted, the essence is sent to Johannesburg for use in the manufacture of high-grade artificial pearls.

United Kingdom

IMPORTS OF U. S. CANNED FISH DECLINE: Great Britain no longer regards the United States as a major source for canned fish imports, according to the May 5 issue of The Fishing News, a British fishery periodical. Japan, formerly an important supplier, furnished only 1,000 metric tons during 1950, and there was an appreciable decline in imports of canned fish from the U.S.S.R. Morocco, however, rose from a prewar level of 500 tons to 11,700 tons during 1950.

More than 90 percent of Britain's total prewar supplies of canned fish were imported. Britain used to import some 76,500 metric tons of canned fish of which 18,800 tons came from the U. S., 19,000 tons from Japan, and 17,300 tons from the U.S.S.R. Home production during the prewar period was only 7,000 tons. During 1950, however, home production of canned fish increased to 15,900 tons and the 1950 imports dropped to 65 percent of the total British supplies of canned fish.

U.S.S.R.

PURCHASES DANISH-BUILT TRAWLERS: The Soviet Union has recently signed a contract to purchase eight Danish-built trawlers, states the May 9 issue of Fiskaren, a Norwegian trade periodical. The boats will cost about 1.5 million kroner (about $210,000) each and will be delivered in the next two years.

Venezuela

FISHING FLEET TO BE INCREASED BY TWENTY-EIGHT VESSELS: The Venezuelan Development Corporation notified the press on May 19 that it has under construction in private shipyards 28 fishing vessels.

These vessels consist of two standard models, a May 21 American consular dispatch from Caracas announces. Eight of the vessels have displacements of 20 metric tons and a speed of 10 knots, with an operation radius of 500 miles and refrigerated storage space. The smaller boats, of which there are 20, have 6 cubic meters of refrigerated storage space.

All of these vessels are powered with Diesel engines. They will be sold to fishing companies or to fishermen who meet the requirements, either for cash or on installments. It is stated the first units will be ready very shortly.

* * * * *

SPINY LOBSTER CLOSED SEASON INCREASED TO FIVE MONTHS: The Venezuelan Ministry of Agriculture has announced that the fishing of spiny lobsters (Palinarus argus) is now prohibited from May 1 to September 30, according to an April 27 report from the American Embassy at Caracas. This supersedes previous closed season resolutions.

Since 1947, the closed season has increased from two months to the currently established five months.

NOTE: SEE COMMERCIAL FISHERIES REVIEW, JUNE 1950, P. 66.