International

FOOD AND AGRICULTURE ORGANIZATION

INTERNATIONAL FISHING BOAT CONGRESS ATTRACTS KEEN INTEREST: The Fisheries Division of the Food and Agriculture Organization of the United Nations (FAO) sponsored an International Fishing Boat Congress with one session in Paris October 12-16, 1953, and a second session in Miami November 16-20, 1953. Reports from FAO headquarters in Rome indicated heavier registrations than anticipated for both meetings. About 60 papers by foremost vessel and equipment designers were presented.

The Miami meeting was held in cooperation with the U. S. Fish and Wildlife Service and the University of Miami Marine Laboratory. Participation was open not only to representatives of governments, but also to members of the fishing industry, naval architects, boat builders, engine manufacturers, etc.

UNITED NATIONS KOREAN REHABILITATION ADMINISTRATION

FISHING VESSEL PURCHASE PROGRAM: There is no certainty that any vessels will be purchased soon by the United Nations Korean Rehabilitation Administration, according to reports received early in October from the chief of the fishery rehabilitation program in Korea. If any are purchased they will be used vessels, not new ones. On the other hand, there will be further allocation of funds in 1954 and consideration will be given then to the question of new construction.

The chief of the fishery rehabilitation program and two Koreans were in New York early in October to decide if any vessels will be purchased, and if so, the size and type.

It is unlikely that any tuna bait boats or purse seiners will be purchased—they are too large for the fishing techniques employed by the Koreans who want the vessels for fishing sharks. Customarily the Korean fishermen use a pair of boats to drag a net.

A "few" bids were received from countries other than the United States.

The chief of the program and his Korean associates were scheduled to visit Gloucester, Massachusetts, to look at some small draggers which are believed to be more nearly the type appropriate for Korean use. The three will later visit other coastal areas, particularly the Pacific Coast, simply "to look around."

INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA

FORTY-FIRST STATUTORY MEETING AT COPENHAGEN: The International Council for the Exploration of the Sea held its 41st Statutory Meeting at Copenhagen, Denmark, September 28 to October 6, 1953, an October 9 U. S. Embassy dispatch from Copenhagen states. The following member countries were represented at the conference: Belgium, Denmark, Finland, France, Federal Republic of Germany, Great Britain, Iceland, Ireland, The Netherlands, Norway, Portugal, Spain, and Sweden. In addition to the delegates there were 86 experts present from member countries. Ireland and Portugal were the only member countries that did not send experts. Observers (8) came from Canada, the United States, New South Wales, and the Food and Agriculture Organization, the
During the course of the conference, 56 technical papers were presented in English, French, or German, and these were published in whole or in part in 45 documents, copies of which were made available to all representatives and observers. Fourteen of the reports dealt with cod and cod fishing, 18 on other fish and shellfish, 7 on fishing methods, 5 on echo measurements and fishing, and 12 with problems of hydrology and oceanography.

These are some of the papers presented at the meeting:

<table>
<thead>
<tr>
<th>Doc. No.</th>
<th>Title</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>The Use of the Echometer in Fish Location - A survey of present knowledge with notes on the use of ASDIC</td>
<td>R. E. Craig</td>
</tr>
<tr>
<td>7</td>
<td>Echo Sounding Experiments on Fish</td>
<td>D. H. Cushing &amp; E. D. Richardson</td>
</tr>
<tr>
<td>8</td>
<td>The Littoral Cod of the Norwegian Skagerak Coast</td>
<td>Alf Dannevig</td>
</tr>
<tr>
<td>13</td>
<td>The State of the Northern Stocks of Cod</td>
<td>H. W. Graham</td>
</tr>
<tr>
<td>14</td>
<td>A Note on Published Trawler/Seiner Comparisons</td>
<td>Graham, Bevertor, Margetts, &amp; Gulland</td>
</tr>
<tr>
<td>15</td>
<td>Some Trials of Seines and Trawls in 1953</td>
<td>Graham, Margetts, and Gulland</td>
</tr>
<tr>
<td>18</td>
<td>Statistics of North Sea Herring Catches and of Catches Per Unit of Effort</td>
<td>B. Havinga</td>
</tr>
<tr>
<td></td>
<td>Lobster Catches Per Unit of Effort during a 4-year Period</td>
<td>B. Havinga</td>
</tr>
<tr>
<td>19</td>
<td>On the Changes of the Stock of Cod in the Baltic</td>
<td>As. J. C. Jensen</td>
</tr>
<tr>
<td>20</td>
<td>On the Cod in Faroe Waters</td>
<td>J. S. Joensen</td>
</tr>
<tr>
<td>21</td>
<td>On the Icelandic Stock of Cod during the Years 1928-1953</td>
<td>Jon Jonsson</td>
</tr>
<tr>
<td>29</td>
<td>The Cod Population of the Oslofjord</td>
<td>F. Otterbech</td>
</tr>
<tr>
<td>30</td>
<td>A Proposal for the Introduction of Organized Echo-Search in North Sea Herring Investigations</td>
<td>B. B. Parrish</td>
</tr>
<tr>
<td>34</td>
<td>Contribution a l'Etude des Thonides de l'Atlantique Tropical (Contribution to the Study of Tropical Atlantic Thunnidae)</td>
<td>E. Postel</td>
</tr>
<tr>
<td>36</td>
<td>Observations on Cod and Cod Fisheries in Lofoten</td>
<td>G. Rollefson</td>
</tr>
<tr>
<td>44</td>
<td>The Efficiency of the Cornish Pot and the Scottish Creel in the Capture of Lobsters and Crabs</td>
<td>H. J. Thomas</td>
</tr>
</tbody>
</table>

**WHALING**

**1953/54 ANTARCTIC SEASON:** A total of 18 pelagic whaling expeditions will operate in the Antarctic during the 1953/54 season; 9 of these will be Norwegian expeditions, reports a September 21 U. S. Embassy dispatch from Oslo. In addition, probably one shore station will be in operation.

All of the floating factories are due to reach the Antarctic before January 2--when the fin-whale season begins--as agreed by the International Whaling Convention. Blue whales will be protected two extra weeks this coming season, until January 16. The total catch limit has been set at 15,500 blue-whale units as against 16,000 units previously.
Norwegian, British, and Dutch whale research scientists will accompany the Norwegian catcher Enern. They will take along 1,200 marked arrows and hope to tag from 500 to 600 whales of the blue, fin, and bottlenose species.

The number of catchers operating with expeditions of all countries will be reduced from 230 for 16 expeditions to 210 for 18 expeditions. An agreement has been made to reduce the number of whale catchers, and this agreement has been signed by all companies except the one Soviet company. There will be 105 Norwegian whale catchers.

This reduction in the number of whale catchers will not, according to the Norwegian Whaling Gazette, cause any reduction in total whale-oil production but may result in a prolongation of the season. Operating expenses will be cut because of present low whale oil prices.

Norwegian Whale-Oil Production Almost All Sold: Practically the entire 1953/54 Norwegian Antarctic whale oil production has been sold at prices varying from Kr. 1,350 to Kr. 1,430 (US$190-200) per long ton, reports an October 15 release from the Norwegian Information Service. The prices average Kr. 1,365 (US$191) per long ton as compared with the average of Kr. 1,420 (US$200) a ton received in the 1952/53 season.

British and South African Whale-Oil Sales Guaranteed: The British Ministry of Food has agreed to pay £67 10s. (US$190) per long ton for the 1954 output of whale oil by British and South African whaling companies, according to the November 2 Foreign Crops and Markets, a U.S. Department of Agriculture publication. The price paid for the past season's output was £76 (US$213) per long ton and for the 1952 production the price was £110 (US$308). Most of the British ships are expected to leave for the Antarctic whaling grounds in November.

INTERNATIONAL PACIFIC HALIBUT COMMISSION

NEW CONVENTION TAKES EFFECT: A new Convention between the United States and Canada for the Preservation of the Halibut Fishery of the Northern Pacific Ocean and Bering Sea came into effect on October 28 when Secretary of State Dulles and Canadian Ambassador Heeney exchanged instruments of ratifications in Washington. An amendment to the Halibut Fishery Act of 1937 which will make that law applicable to the new treaty became effective at the same time, reports a U.S. State Department release.
The Halibut Convention, which was signed in Ottawa on March 2, 1953, is the fourth in a series between the two governments and replaces the Convention of 1937. The name of the Commission, originally established by the 1923 Convention and continued since that date, has been changed to International Pacific Halibut Commission. Its former name, "International Fisheries Commission," was chosen at a time when this Commission was the only one of its kind. The formation since then of other international fisheries commissions made it desirable that each be readily identified from its name; hence, the addition of the descriptive words "Pacific" and "halibut" to the name.

The Convention differs from the 1937 Convention in three particulars:

The first and most important changes is that the Commission may now establish more than one open season during the year. This power to declare more than one open season is expected to increase the yield from some halibut stocks which may be underutilized at present.

The size of the Commission is enlarged from four to six members, three from each country.

The third change of substance is a provision for the exercise of regulatory authority respecting halibut caught incidentally to fishing for other species of fish during the open season. The 1937 Convention had provided for this type of regulation only during the closed season.

**Angola**

TUNA CANNING: There are four species of tuna canned in Angola: albacore (Neothunnus albacora), patudo (Parathunnus obesus), bonito (Katsuwonus pelamis), and gaiado (scientific name unknown), reports a September 11 U. S. consular dispatch from Luanda.

The tuna-in-brine pack prepared in Angola is processed in the following manner:

The fish is eviscerated, beheaded, and cut into four fillets. The fillets are then cut the length of the can in which they are to be packed. Cutting, cooking, and other operations are performed mechanically; cans are packed by hand.

The fish is cooked by immersion in brine heated by steam coils. After cooking, bones and skins are removed.

Both the "solid pack" and the "flake pack" are packed in 13-oz. cans (48 cans to a case) and 74½-oz. cans (12 cans to a case). The tuna is packed in a light brine solution.

**Bahama Islands**

STATUS OF THE FISHERIES: Fisheries Lack Capital: Limited supply and uncertain financial returns of the Bahamian fisheries have resulted in comparatively little capital investment from domestic and foreign sources towards its development and promotion, reports a September 4 U. S. consular dispatch from Nassau. The Agricultural
and Marine Products Board of the Bahamas Government is striving to foster and encourage further development and protection of the fisheries.

Retail Price Controls for Fishery Products: Due to the continued rising of retail fish prices, maximum prices were announced by the Essential Supplies and Price Control Committee on January 23, 1953. These prices became effective on January 26, and sellers were ordered to install weighing scales in the Public Fish Market. A protest was made by the Out Island fishermen, who objected as strongly to the scales as to the control of fish prices. Spanish Wells and Abaco fishermen refused to bring any fish to the local market.

On February 3, 1953, the Committee raised the maximum prices of fishery products as follows: conch was increased from 1s. (14 U.S. cents) to 2s. 6d. (35 U.S. cents) per pound; first-grade fish: from 2s. to 3s. (28 to 42 U.S. cents) per pound for the tail portion, 1s. 6d. to 2s. 6d. (21 to 35 U.S. cents) per pound, for the head portion, and ls. 9d. to 2s. 9d. (24 to 38 U.S. cents) per pound for whole fish. Retail prices of other fish, second- and third-grade fish, turtle, and spiny lobster were correspondingly increased. These higher maximum prices were closer to the retail prices in effect immediately prior to the first price control order.

Spiny Lobster Catch and Exports: Approximately 939,931 spiny lobsters (crawfish) with a total weight of 1,424,150 pounds were taken in the fishing season from October 1 to March 15, 1953. The value of the catch was £76,051 (US$212,900) ex-vessel, and a royalty of £1,880 (US$5,250) was received.

Spiny lobster exports during 1952 were valued at £99,649 (US$279,000), compared to 1951 exports valued at £90,805 (US$254,000).

Finfish Exports: Finfish exports during 1952 totaled about 184,800 pounds, valued at £10,656 (US$29,800).

Sponge Industry: The first closure of the sponge beds off the Bahamas necessitated by the sponge blight was in 1939. The beds were reopened in 1946, but sufficient improvement had not been made so the beds were reclosed from late in 1947 through 1952.

Sponge exports in 1952 were limited to stocks on hand--300 pounds, valued at £664 (US$1,850), compared to 400 pounds, valued at £1,620 (US$4,500) in 1951.

In earlier years the sponge industry and sponge exports held an important place in the Bahamian economy. At its height the industry employed approximately 4,000 workers. The big proportion of these men, especially those from Andros, Abaco, and Long Island, now make their livelihood by fishing. The Agricultural and Marine Products Board feels that the future outlook for the sponge industry is encouraging and plans to make a preliminary survey to determine what improvement has occurred during the closure period.
Brazil

SHRIMP FISHERY EXPANSION POSSIBLE: Production of shrimp in Brazil has been relatively small, chiefly for local fresh markets, reports an October 1 U. S. Embassy dispatch from Rio de Janeiro. But according to Government and trade sources, shrimp are abundant in Brazilian coastal waters and could provide a substantial output for export as well as for greater domestic consumption. The chief requirements appear to be skilled management, the investment of capital in trawlers and facilities for handling and processing, and reasonably favorable government treatment in matters of import licenses and exchange rates.

Shrimp are reported abundant along most of the Brazilian coast. The present catch is made largely by small operators in inshore waters near the larger cities, and sold on local fresh markets. Commercial interest is growing, however, in fishing the more distant grounds to provide frozen shrimp for both the large Brazilian cities and for export.

The area obtaining most consideration is the northern coast from the mouth of the Amazon River to Recife. Fishery officials of the Ministry of Agriculture claim that supplies of inshore shrimp are available in this area throughout the year, and that offshore waters yield heavy catches of large shrimp from June through September. Exploratory work to obtain information on the latter apparently is being contemplated by certain United States interests. Large-scale operations on the North Coast would meet little competition from local fishermen. The distance to U. S. markets is less than from other shrimp-producing sections of the coast.

Officials of the Brazilian Government appear favorably inclined towards expanded fishing operations both by Brazilian and foreign capital. They believe that costs of seafood for Brazilian consumers, now at a high level compared to the relatively abundant resources, can be reduced substantially and that badly needed foreign exchange can be derived through use of modern fishing vessels and freezing facilities.

A shrimp fishing company was established in northern Brazil in 1951 by a U. S. citizen in Sao Luiz, Maranhao. This firm is now distributing frozen shrimp in coastal towns, including Rio de Janeiro and Sao Paulo, and is reported in the process of developing a market in the United States. The apparent success of this firm is encouraging formation of other companies and rapid development of shrimp fishing in the region is possible during the next few years.

There are certain factors, however, which may retard the development of a shrimp industry in Brazil. Brazil's present deficiency in foreign exchange makes it difficult to obtain import licenses and official exchange for necessary equipment. Also, to make exports possible, a preferential exchange rate will be needed substantially higher than the present basic rate of 18.36 cruzeiros to one U. S. dollar, which currently is applicable to shrimp. There is a further hazard in the quotas for domestic consumption frequently set by government authorities. These quotas are subject to local ceiling prices before exports are allowed.

Canada

BRITISH COLUMBIA SALMON EXPORT REGULATIONS: On the recommendation of the Minister of Fisheries, the Governor General in Council on September 17 amended the section of the British Columbia Fishery Regulations dealing with the export of salmon, reports an October 2 release from the Canadian Department of Fisheries. The amendment (Order in Council P. C. 1953-1416) revoked paragraph 2 of subsection 3 of section 6, and substituted a paragraph which has the effect of allowing the export of fresh coho (silver) salmon during the present year, but limiting it after September 1, 1954. The new paragraph (2) reads:
"(2) On and after September 1, 1954, no one shall export from Canada 'coho' salmon except in a canned, salted, smoked, cured or frozen condition."

The British Columbia Fishery regulations were made and established by Order in Council P. C. 5887 of November 22, 1949, as amended.

B. C. SALMON CANNERS NEGOTIATING FOR LARGE SALE TO BRITAIN: The British Columbia salmon industry is now negotiating for the sale of additional canned salmon to the United Kingdom, reports an October 2 U. S. Embassy dispatch from London. The London Daily Express (September 30) carried the following story with an Ottawa dateline:

"...The British Columbia salmon industry hopes to sell several million dollars worth of canned salmon in Britain through buying British equipment for the West Coast industry, a fisheries Department official said today.

"The deal to provide Britain with dollars to buy B. C. salmon is being discussed in London this week by Fisheries Minister James Sinclair, J. M. Buchan, president of B. C. Packers, Ltd., and Roger Hager, president of the Canadian Fishing Company, Ltd.

"An official said in Ottawa that members of the B. C. salmon canning industry have put together a parcel of orders for equipment such as tinplate, Diesel engines for boats, nets and lines which they would buy in Britain.

"It amounts to several million dollars, he said. It would not be a straight barter deal, but representatives of the industry would ask that the dollars be spent on B. C. salmon.

"Canada's former big market in Britain for salmon declined sharply since 1945 because of Britain's acute shortage of dollars. In the last four years Canada has sold 11,200,000 dollars (£4,000,000) worth of salmon to Britain and now faces large surpluses on the Canadian market."

Denmark

FISHERIES TO EXPAND: New Harbor Construction: New construction and expansion of fishing harbors is planned in the Danish North Sea ports of Skagen (the Skaw) and Frederikshavn, reports the October 3 issue of The Fishing News, a British trade magazine. At Frederikshavn a new fishery harbor will be constructed to cost about US$2.8 million.

Skagen seems to be facing a great future as the largest fishing port in Denmark as the harbor is being expanded at a cost of about $1.7 million. At present Skagen can accommodate about 400 vessels, but after it has been expanded the harbor will handle about 800 vessels. Fishermen from Esbjerg and other Danish fishery towns are planning to move to Skagen; the town will also more and more become the rendezvous of Norwegian, Swedish, and German cutter fleets. Until now Denmark's largest fishery port has been Esbjerg, but this port will have to surrender its title to Skagen.

Modern Vessels for Fishing Off Greenland: Some Danish shipyards are building modern wooden fishing vessels for Greenland fishing to meet the competition from many foreign vessels now fishing off Greenland. Danish authorities are also building several fish houses in West Greenland towns as the existing storage is inadequate.
Greece

SPONGE CULTURE METHOD: The discovery of a new method of sponge propagation and culture in Greek waters was announced recently by a well-known Greek scientist, reports the September 1953 Aleia, a Greek trade magazine. The new method, which will be revealed soon, is based on a large sponge production, and not a laboratory culture like other methods.

* * * * *

SPONGE-FISHING AGREEMENT WITH LIBYA: The right to engage in sponge fishing in Libyan waters was extended to Greek vessels in an agreement signed at Benghazi on July between representatives of the Greek Government and the Cyrenaica Sponge Fishing Company. The agreement will remain in effect until December 31, 1958.

The agreement provides that Greek vessels may engage in sponge fishing in Libyan waters and freely transport their catches to Greece. An annual lump-sum fee of £500 (US$1,400) is provided for each fishing permit. There is no obligation on the part of the Greek fishing fleets to hire local personnel, and all disciplinary and administrative matters relating to crew members are to be resolved under Greek law. The Cyrenaica Sponge Fishing Company reserves the right to sign similar contracts with third parties provided the terms of such agreements are not prejudicial to the agreement signed with Greece.

In consideration for this agreement the Greek Government committed itself to resume the issuance of licenses for Libyan live meat on which there has been an embargo since the currency devaluation of April 9, 1953.

Greek sponge fishing vessels will operate under the agreement for the first time in the spring of 1954 when the new sponge fishing season begins, an October 5 U. S. Embassy dispatch from Athens reports.

Greenland

FISHERIES PRODUCTION, JANUARY-NOVEMBER 1952: The landings of fish in Greenland during the first eleven months of 1952 totaled about 13,000 metric tons (see table), reports a September 22 U. S. Embassy dispatch from Copenhagen, Denmark. The fish were bought from the fishermen by the Danish Royal Greenland Commerce.

<table>
<thead>
<tr>
<th>Species</th>
<th>Landings (Metric Tons)</th>
<th>Produced (product weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Salted</td>
</tr>
<tr>
<td>Cod</td>
<td>11,4831/</td>
<td>5,000</td>
</tr>
<tr>
<td>Wolffish (catfish)</td>
<td>750</td>
<td>-</td>
</tr>
<tr>
<td>Halibut2/</td>
<td>282</td>
<td>-</td>
</tr>
<tr>
<td>Salmon</td>
<td>6.5</td>
<td>-</td>
</tr>
<tr>
<td>Shrimp</td>
<td>212</td>
<td>-</td>
</tr>
<tr>
<td>Lumpsucker roe5/</td>
<td>14</td>
<td>-</td>
</tr>
</tbody>
</table>

1/HEADLESS WEIGHT.
2/175 METRIC TONS REINHARDTIUS HIPPOGLOSSOIDES (30 FOR FREEZING, 146 FOR FILLETING), AND 106 METRIC TONS HIPPOGLOSSUS VULGARIS (ALL FOR FREEZING).
3/WEIGHT OF CLEANED SHRIMP FOR FREEZING.
4/IN 450,000 "QUARTER TINS" WITH A NET CONTENT OF 80 GRAMS (218 OUNCES) EACH.
5/SHIPPED TO COPENHAGEN FOR PROCESSING INTO CAVIAR.

NOTE: DOES NOT INCLUDE THE LANDINGS OF SALMON WHICH YIELDED 400 BARRELS OF SALTED SALMON.

The catch of cod was about normal, although direct comparison with previous statistics is not possible. For the entire 1949/50 season there were 10,052 metric tons of cod landed; for 1950/51, 13,059 tons; and for 1951/52, 11,072 tons. In 1952 there was a decline in salt-fish production despite a normal catch due to the smaller average size of the fish landed. Catches of halibut, shrimp, and wolffish held up well during 1952.
The frozen products were sold by a Government-controlled private corporation to Italy, Israel, and the United States. Quantities of halibut went to England, and much of the salmon was sent to Sweden. While salted Greenland cod was marketed during 1951 in Italy, Greece, Spain, and Portugal, the two latter countries were not buyers in 1952. Due to the unfavorable Spanish trade balance with Denmark, no Spanish import licenses were issued, although a three-million kroner export of that item had been provided in the Danish-Spanish trade agreement. Portugal was unwilling to pay acceptable prices.

Japan

1953 TUNA EXPORT QUOTA TO U. S.: It appears that the Japanese 1953 quota for canned and frozen tuna exports to the United States has been decided at 36,000 tons of frozen and 1,500,000 cases of canned tuna, according to a Japanese press report (Nippon Suisan Shimbun, September 10). The determination of this quota has been left entirely up to the Japanese Fishery Agency.

TUNA CANNERS DISCUSS POLICY ON EXPORTS TO THE U. S.: Prominent representatives of the Japanese canned tuna industry recently held discussions on policy of exports to the United States, reports a September 28 U. S. Embassy dispatch from Tokyo. The talks have been featured by reports of a recent visit to the United States by two leading members of the industry. The discussions and reports on the trip have been featured in Japanese fishery newspapers. Discussions on an export and sales policy of canned tuna to the United States included the following items:

1. Export of 1,500,000 cases (48 7-oz. cans) of canned tuna in 1954.
2. Exports to emphasize tuna canned in brine in preference to tuna canned in oil.
3. Japanese canners expect to compete with frozen tuna exporters in paying high ex-vessel prices for tuna, especially during the coming albacore season beginning in December.
4. Reduction in production costs to offset the expected high cost of fish. This will include an effort to reduce the cost of cans.
5. A joint plan for buying tuna for canning and in consideration of U. S. consumer market prices and other market conditions.
6. Improved financing and credit assistance to members of the canning industry.
7. The development of standard brands to avoid confusion in sales programs.
8. Continuation of the Tokyo Canned Tuna Sales Company as the principal sales outlet to Japanese exporters.
9. Establishment of a program for the more orderly marketing of Japanese canned tuna in the United States. In this connection consideration is being given to the so-called "Eckdale Plan" which would establish a joint company by Japanese-United States investments for the buying and selling of Japanese tuna imports (canned products especially) to the United States.
10. Optimism that no political action will be taken in the United States on the tuna tariff question until at least March 1954.

RESEARCH AGENT REPORTS GOOD PROSPECTS FOR EXPORTS OF FROZEN TUNA TO CANADA: The Japanese frozen tuna industry has received encouraging news from a Japanese foreign market researcher stationed in Vancouver, Canada, who reports that the prospects are good for exports of frozen tuna to that country, according to a Japanese press report (Nippon Suisan Shimbun, September 10). Since the demand is from canners on Canada's Pacific coast, it may be anticipated that there will be, just
as in the case of the frozen tuna trade with the United States, interference from Japan's canning industry and pressure from Canadian fishermen. The gist of the report is as follows:

The tuna catch on Canada's Pacific coast has declined extraordinarily in recent years to such an extent that the tuna schools cannot be found on the grounds at all. The Canadian Pacific Coast tuna canners are planning a policy of increasing their imports to make up for this. In 1952 they brought in 5,204,942 pounds from Japan (valued at C$658,052), and in January and February of this year they imported 100,386 pounds (C$13,118 worth) of frozen tuna. At present the salmon fishing season is at its height and tuna canning is inactive, but with a changeover from salmon to tuna canning in the winter, a large volume of orders is expected. At the prices set by the Japanese it is believed that imports will go right on increasing.

********

VINYL FIBER TUNA SEINE NET PROVES SUCCESSFUL: The Cremona (vinyl fiber) tuna seine net has been given credit for the success of the high-line Japanese tuna seiner Iemitsu Maru (38 tons) in the fleet operating off Fukushima and Ibaraki prefectures, according to a Japanese press report (Suisan Shuho, September 1). From last May to August 20 about 50 vessels operated in the tuna fishery in this area and the Iemitsu Maru was the most successful, landing a total of 135 metric tons, valued at 2 million yen (US$5,500) ex-vessel.

The new net (in use since the beginning of this year) is made of all-Cremona knotless netting, and contains 10,776 pounds of No. 18 twine. The net is 500 fathoms long as hung or 740 fathoms stretched, and 120 fathoms in depth. The net was set 50 times and 13 of the sets took fish. The catch was 60 percent yellowfin and 40 percent black tuna; the biggest fish taken was about 174 pounds. The master of the Iemitsu Maru had the following to say about the Cremona net:
"The strength of the Cremona knotless is, of course, greater than that of cotton.
"Sinking speed and behavior of the net do not differ from cotton.
"Since it is not necessary to dry the net, the expense and labor of drying are saved and the number of sets is increased.
"The knotless net is all right. Before we were used to it we worried about repairing it, but we found it hardly any more trouble than with knotted net. At a set on August 18 the current was very strong, the net got tangled, the floats sank, and it was carried under the vessel where it got caught on the rudder. Only the part of the net that got hung up was damaged and the rest of it was saved. If a cotton net had got into such a mess the whole net probably would have been lost.

"Finally, with such a strong net considerable labor is saved and the captain's work is made easier. Under present conditions Cremona net is probably the best possible for tuna seines."

How long the strength of this netting will hold up is still a question. The life of a cotton net is 4 years at the most, and the average is 2 to 3 years. How long the life of a Cremona net will be is still completely unknown, but the oldest net in use now is 2 years old and its strength has not changed at all since it was made. It is said that it may be good for 5 or 6, or even 7 years.
Mexico

GOOD SEASON PREDICTED FOR SINALOA SHRIMP FISHERY: A favorable shrimp season is anticipated in the Sinaloa area of Mexico, reports an October 1 U. S. consular dispatch from Mazatlan. The bay shrimp fishing season reopened in the Altata and Topolobampos districts on September 1, and in Mazatlan the opening of the deep sea shrimp fishing season was scheduled for October 1.

Approximately 107,350,000 pesos (US$12,400,000) are invested in industrial enterprises in Mazatlan, a recent survey revealed. Mazatlan industry includes four shrimp-freezing plants with an investment of 22 million pesos (US$2.5 million); and a shrimp fishing fleet of 130 vessels (manned by 800 men), valued at 22 million pesos (US$2.5 million).

Mozambique

CANNED FISHERY PRODUCTS IMPORTS, 1952: Mozambique imports of canned fishery products in 1952 amounted to 942,300 pounds, valued at Escudos 8,092,500 (US$280,000), reports an October 9 U. S. consular dispatch from Lourenco Marques. This is an increase of 10 percent in quantity and 8 percent in value as compared with 1951 imports of 852,900 pounds, valued at Escudos 7,459,400 (US$258,000). Imports in 1950 amounted to 585,600 pounds, valued at Escudos 5,374,300 (US$185,600).

The United States share of the canned fish market is small. It consists largely of salmon, which is popular in Lourenco Marques. However, the import control authorities are very reluctant to issue licenses for salmon since it is competitive with Portuguese canned fish. In 1952 a total of 5,400 pounds of canned fish (mostly salmon) was imported from the United States with a value of Escudos 81,600 (US$2,800). In 1951 these imports amounted to only 1,400 pounds, valued at Escudos 11,800 (US$400); and in 1950, 1,900 pounds, valued at Escudos 34,198 (US$1,200).

Although the principal fish item in the Mozambique diet is bacalhau (dried cod), substantial quantities of canned tuna and sardines (all from Angola and Portugal) are also consumed. Demand for these canned items has increased considerably in recent years. Imports of canned sardines increased from 232,300 pounds in 1950 to 495,200 pounds in 1951 and 650,900 pounds in 1952. The value of canned sardine imports rose from Escudos 2,151,800 (US$74,300) in 1950 to Escudos 4,232,200 (US$146,200) in 1951 and Escudos 5,233,200 (US$180,800) in 1952.

Imports of canned tuna increased from 70,900 pounds in 1950 to 115,400 pounds in 1951 and dropped to 101,300 pounds in 1952. The value of canned tuna imports rose from Escudos 913,052 (US$31,500) in 1950 to Escudos 1,360,800 (US$47,000) in 1951 and dropped to Escudos 1,208,185 (US$41,700) in 1952.

The Mozambique tariff is divided into two principal categories, of which the preferential rate applies only to imports from Portuguese territory and the general rate applies to all foreign countries. The regular tax is one based on ad-valorem value and can only be changed by legislation. The supertax can be altered by executive action and is charged on the original ad-valorem value and not on the value plus the regular tax.

The shortage of dollar exchange is the principal factor limiting sales of U. S. canned goods to Mozambique at present since these items fall in the luxury class. The general rule is that the Exchange Control Council will grant any dealer a total of US$500 every six months for the purchase of U. S. groceries, cigars, and similar miscellaneous-
ous items. The dealer can use this sum for whatever type he wishes. One large firm is not using this allocation because it considers that it is not worth the trouble involved for so small a volume.

In addition to this system, wholesalers sometimes make an application for a permit to import from the United States provided the firm arranges its own dollars. This involves the use of dollars located outside the country, but, in fact, such dollars are usually purchased from local exchange brokers.

Thus, the principal factor limiting U.S. participation is the exchange control. All merchants agree that they would purchase substantially larger quantities from the United States if exchange permits were available. One firm states that it would purchase roughly ten times its present imports. Price, however, would also be a limiting factor if exchange were available.

### Norway

**FISHERY PRODUCTS EXPORTS TO U.S., JANUARY-MARCH 1953:** Norway's principal exports of fishery products to the United States in January-March 1953 were less than in the same period of 1952 (see table), according to a July 29 U.S. Embassy dispatch from Oslo. The main decline was in exports of frozen fillets, which were 66 percent less in quantity and 64 percent lower in value than in the first three months of 1952.

Despite the reportedly depressed market in the United States for frozen fillets, Norway expects to move sizable quantities to the United States. Norwegian authorities claim that Norway has been a traditional exporter of this item and that competition from the United Kingdom, Denmark, Holland, and Germany has made inroads in their trade.

Fishing interests state that the United States market requires a special pack and they have "tailored" their operations on a long-term basis. The trade reports that Norway was not able to ship large quantities to the United States at the prevailing prices.

**Export Market Outlook for Fishery Products:** The marketing possibilities for Norwegian fishery products varied considerably during the first half of this year, reports the October 7 Foreign Trade, a Canadian Government publication. There is still a good market for herring, mainly in European countries; but the restrictions recently imposed by Brazil have created difficulties in exports of dried salted cod (klipfish) previously taken by Brazil in large quantities. During the first four months of this year,
the value of these exports to Brazil declined to 14.3 million kroner (US$2 million) from 46.7 million (US$6.5 million) last year. Import restrictions in other countries have also hampered the export of canned fishery products, and present stocks are large.

Exports of fishery products to the United States, however, compare well with last year; the export value for the first four months of the year totaled 17.1 million kroner (US$2.4 million) as compared to 15.8 million kroner (US$2.2 million) in 1952.

***

HAND-LINE FISHING WITH LIGHT DEVELOPED: A "Lightbeam Sinker" has been invented in Norway for the use of commercial and sport hand-line fishermen. The sinker is in the shape of a tube, containing a small battery and bulb with two small windows allowing two rays of light to escape. The light attracts the fish. Used with either ordinary baited or unbaited hooks, this sinker has produced some rather astounding results, reports the August 22 Fish Trades Gazette, a British trade magazine.

The sinker is made of polished brass and guaranteed waterproof under pressures up to 15 atmospheres (220 pounds per square inch). Patents have been applied for in many countries and a considerable number have been exported to various countries, including the United States and Canada.

The "Lightbeam Sinker" is being produced at the rate of about 10,000 per week.

***

WATERTIGHT PLYWOOD BARREL: A cylindrical lightweight and watertight plywood barrel has been put into production in a factory in Larvik, Norway, reports an October 15 release from the Norwegian Information Service. The barrel is the combination of four new patents: two Norwegian, one Finnish, and one Danish. As soon as possible other factories will be established in a number of towns on the west coast of Norway and in North Norway.

Weighing one-third less than stave barrels, the new type will effect substantial freight savings. At the same time, being absolutely watertight, it is suitable for salted herring, fish and whale oils, and berries.

Initially, the barrel will be made with an inside diameter of 460 millimeters (18 inches). The height, however, can be adjusted according to the volume content desired—from 35 to 120 liter (9 to 32 gallons). Later on, as the demand expands, the barrel will be made with different diameters to hold from 20 to 200 liter (5 to 50 gallons).

***

DEHYDRATED WHALE MEAT: Norwegian Antarctic whaling companies are keenly interested in a new German method of dehydrating whale meat, according to the October 3 issue of The Fishing News, a British trade periodical. The method, invented by a Dr. Zimmerman, makes it possible to more effectively use whale meat.

The new process draws out the water from the whale meat. This stops all bacteria growth and improves the quality of the meat, according to the inventor. The whale-oil taste disappears, and further processing, such as freezing, becomes unnecessary. The water is replaced by some kind of stabilizing fat, the consistency of which is a factory secret. The weight of the meat is reduced by about 70 percent.
Dehydrated whale meat can be shipped by ordinary freight resulting in savings in transportation and handling costs.

Seychelles

SURVEY REVEALS RICH FISHING GROUNDS IN INDIAN OCEAN: Large untouched fishing areas exist in the western part of the Indian Ocean, according to a report by the officers of the Mauritius-Seychelles Fishery Survey. This survey for two years has investigated the possibility of exploiting the fisheries of that area on a commercial scale. Reports indicate that fishing by hand lines yielded hourly catches equal to the average efforts of trawlers on some of the richer fishing grounds in Europe. The project was financed by a research grant under the British Colonial Development and Welfare Acts, reports the September 1953 South African Shipping News and Fishing Industry Review.

The two scientists sailed about 28,000 miles in a motor-driven 70-foot Scottish drifter on the survey. The fishing grounds discovered are on a chain of oceanic banks scattered east of Africa in the Indian Ocean. They rise steeply out of deep water and are located at a depth of about 30 fathoms.

The report issued on the survey gives an account of marine life in the depths of the Indian Ocean. It includes descriptions of fishing grounds around the little-known remote islands of the Indian Ocean; comprehensive notes on fishing gear; marketing of fish; sharks; turtles; the problems of poisonous fish; and meteorology. It also reveals there is a fishable area of 7,500 square miles within three days' steaming of the Seychelles.

Spain

LARGE FREEZER AND STORAGE PLANT BUILT: The largest and most modern freezing and cold-storage plant in Spain has been built on the Marques de Comillas pier in Cadiz, reports an October 6 U. S. consular dispatch from Seville. The plant is about ready to start operations and its greatest value is expected to be for the freezing and storage of fish and shellfish for subsequent export. This plant, said to be the first of a series, has completely modern deep-freeze installations.

The plant is operated by the Spanish Government corporation Industrias Gaditanas del Frio Industrial, S. A. It has taken three years to build and cost 45 million pesetas (US$2 million).

The plant is a five-story building, 98 feet high, covering an area of 25,724 square feet, with a storage capacity of 3,600 metric tons by weight. It has cold-storage space for temperatures of 4° C. (39° F.) and frozen storage space for temperatures of -18° C. (-0.4° F.). In addition, it includes an ice factory with a potential production of 75 metric tons a day and with ice storage space of 1,100 metric tons.

The fact that the Zona Franca (or Free Zone) is part owner of the plant suggests that it will be possible for all kinds of food products to be brought to Cadiz for freezing or for cold storage, and to be reexported from Spain without being subject to Spanish customs formalities. Likewise, customs arrangements for importation into Spain could be completed long after the goods had been brought into the plant, processed, and stored. This is expected to be the case despite the fact that the plant is not inside the Free-Zone enclave, which is about two kilometers away.

Several American fish-importing firms are known to be interested in utilizing the facilities of the freezing plant in the near future. One firm has been importing shrimp from a firm in Huelva. The shrimp were frozen in Huelva and taken by refrigerated
truck to Cadiz, as vessels with refrigerated chambers do not call at Huelva. With this modern freezing and frozen storage plant on the pier at Cadiz, shrimp fishing enterprises will have a convenient center of operations, readily accessible to shipping lines.

The manager of the firm also reports that he has been visited by representatives of several other American firms which are interested in making contracts for the purchase of frozen fish, either direct from the IGFISA or through established commercial fishing companies.

There are Spanish fishing companies operating out of many ports along the coast which may be expected to make use of the IGFISA plant. These include those whose present headquarters are at Ayamonte, Huelva, Barbate, and Algeciras, as well as the smaller fishing villages on the Bay of Cadiz. The waters of the southwestern Spanish coast are rich in seafood, and it is predicted that this modern freezing plant will make it possible to increase the catch considerably with existing facilities. Under present circumstances, there are more fishing fleets than the present Spanish market can productively support. Persons familiar with fishing operations say they do not feel that the Spanish fishing industry offers a particularly fertile field for foreign capital investment, as the present owners are in a position to expand their fleets and increase operations considerably without foreign capital assistance.

** *** ***

** Fish Canning Trends in Vigo District, September 1953:** Fish-canning activities in the Vigo District of Spain were reported to have continued favorable during September, reports an October 9 U. S. consular dispatch from Vigo. Due to the scarcity of sardines, canners substituted a species of needlefish called "alcrique," which is said to look and taste like sardines and to be in great demand in the domestic market because of its low retail price.

The fish catch sold over the Vigo Fish Exchange during September was greater than the previous month due to the arrival of large schools of palometa (needlefish) along the Galician shore. Catches would have been even larger but for reported coal shortages which hampered the vessels. Profits, however, were claimed to be too small for any effective replacement of materials and equipment. The fishing industry is said to be renewing its demand for Government assistance through the reduction of coal and fuel oil prices.

** *****

** United Kingdom**

** Mobile Fish-Meal Plants in Scotland:** Mobile fish-meal and fish-oil plants for coastal areas of the Highlands in Scotland have been recommended by the Scottish Board for Industry, reports The Fishing News of September 12, a British trade Journal. These mobile plants have been reported as successful in Canada. This type of plant would be cheaper than the permanent brick structures, and they would follow the fisheries as mobile sawmills follow timber felling.

** *****

** Greenland Coast Survey for New Trawling Grounds:** A survey of certain fishing grounds off the coast of Greenland in search of new trawling grounds is being sponsored by the White Fish Authority, according to The Fishing News, (a British trade magazine) of September 12. The Greenland area has become increasingly important to British distant-water trawlers due to the closure of other grounds. The survey was due to begin early in October and last about 60 days. The cost is estimated at about £16,000 (US$44,800).

A request that a hydrographic survey should be made in order to improve the detail of the bottom topography shown on Admiralty charts was initially put forward by the
British Trawlers' Federation. It was discussed by the White Fish Authority, the Ministry of Agriculture and Fisheries, and the Hydrographic Department of the Admiralty. As a result, the Admiralty agreed to lend specialist hydrographic personnel together with technical equipment, on the assumption that a suitable vessel will be made available and provided with the necessary depth-finding and position-finding equipment.

For the survey, the Authority proposes to charter the S. T. Sletnes, a Grimsby trawler. The vessel is a large modern trawler, 180 ft. long, and carries the necessary equipment.

The first area to be explored by systematic lines of soundings will be the coastal shelf from the limit of territorial waters out to the 200-fathom line on the southwest coast of Greenland, from the longitude of Cape Farewell to the latitude of Cape Desolation.

About one quarter of the cost will be provided by the Ministry of Agriculture and Fisheries, and in addition there will be the specialist assistance given by Admiralty personnel. The rest of the cost will be borne by the Authority and by contributions from trawler owners.

25,000 FISH RETAILERS IN GREAT BRITAIN

DO YOU KNOW:

That in 1950 there were 17,000 fried fish shops in Great Britain that did an annual business of £33 million (US$92.4 million); 8,527 fishmongers and poulterers with sales of £56.8 million (US$159 million), according to the Census of Distribution and Other Services, 1950, a British Government survey report on retail and service trades. No fewer than 4,399 greengrocers out of a total of 35,236 were listed as also selling fish.

In the Greater London area in 1950 there were 1,914 fishmonger establishments whose sales totaled £16.3 million (US$45.6 million). These shops employed 6,823 persons who received £1.4 million (US$3.9 million) in wages and salaries.

The survey also revealed that part-time workers play a large part in almost all British retail and service trades, including fried fish shops. A high proportion are family helpers assisting in "one-man" businesses.