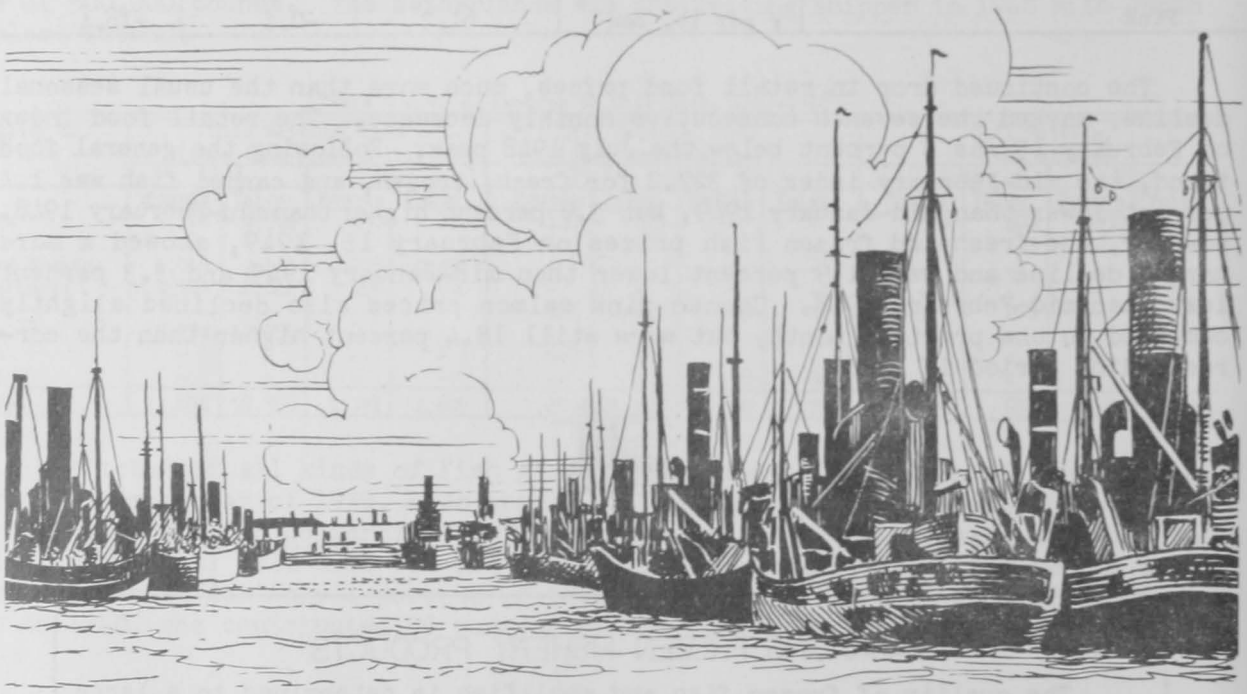
Bizone Germany

1948 HERRING SEASON DISAPPOINTING: The 1948 German deep-sea herring season just closed is generally declared by experts as having been disappointing. The quantity disappointed less than the quality, according to a January 21 report from Bremen, Germany.

The varying sizes of the herring are due to biological and hydrographical conditions, which are difficult to investigate. British researches have shown that the nourishment for herring during 1948 was poor and below average. Seventy percent of catches on the Dogger Bank yielded fish of from three to four years old, as compared with from five to six years old caught formerly.



PORT OF BREMERHAVEN SHOWING FISHING VESSELS IN PORT

Deep-sea fishing companies state that storms which occurred earlier this year than in preceding years greatly impeded fishing and may be the reason for the premature spawning of the herring. Catches of 1948 exceeded in quantity those of 1947 by almost 8 percent. The ports of Bremerhaven, Cuxhaven, and Hamburg recorded a total catch of 235,237,000 pounds of herring during 1948, compared to 215,749,000 pounds in 1947.

A proper evaluation of the catches must take into consideration that the fishing fleet increased by approximately 15 percent during 1948 as compared with 1947. During 1948, there were 169 herring fishing vessels operating out of the three main German ports compared to 144 in 1947.

Therefore, it was neither lack of ability of the crews nor the consequences of the economic development which accounted for the unusually small catches. The fishing companies now have to face serious financial problems on account of the poor quality catches of the past season.

* * * * *

TRADE AGREEMENT WITH NORWAY: Agreement was finally reached with Norway in the latter part of December 1948 for the delivery during the first half of 1949 to the Bizone of 130,600 metric tons of fish valued at $16,000,000, according to a January 6 report from the American Consulate General at Hamburg (see table). It is reported that a compromise price was established at somewhat less than the Norwegian demand for a 15 percent increase over the 1948 prices which had previously disrupted negotiations. In 1948, Norway supplied almost 50 percent of Bizone Germany's imports, and Iceland nearly 25 percent. An agreement concluded in December 1948 will make the Bizone a large importer of Icelandic fish in 1949 also.

Fish to be Delivered by Norway to Bizone Germany, First Half of 1949

Type	Metric Tons
Herring, fresh	69,000
" , frozen	17,000
" , salted	35,000
Cod, fresh	2,000
Haddock, fresh	2,000
Cod fillets, frozen	100
Ling fillets, frozen	300
Other fresh and frozen fish	4,500
Other frozen fillets	700
Total	130,600

Brazil

GRANTS DUTY EXEMPTION FOR IMPORTS OF VESSELS FOR FISHING: Brazilian Law No. 630 dated February 24, 1949, published March 8, 1949, grants duty exemption to all firms and individuals acquiring vessels destined for the Brazilian fishing industry, according to a March 10 American consular report from Rio de Janeiro. The law, which entered into effect on the date of publication, provides that it is retroactive and would apply to imports of such vessels entered under bond between the date of issue of the law and the date of publication.

* * * * *

JOINT BRAZIL-UNITED STATES TECHNICAL COMMISSION: The Joint Brazil-United States Technical Commission has completed the task assigned to it and has submitted its Report to the Government of Brazil and the Government of the United States, according to a March 9 release from the U. S. Department of State. The Commission was created by authority of President Truman and President Dutra pursuant to the request of Brazil for the assistance of technicians of the United States Government to collaborate with technicians of the Brazilian Government in an analysis of the factors in Brazil which tend to promote or to retard the economic development of the country.

The United States delegation arrived in Rio de Janeiro on September 7, 1948, whereupon the Commission was organized into a Central Commission and a number of

sub-Commissions assigned to study certain subjects, among which were included fishing and fisheries.

Following is a summary of the part of the Report dealing with fisheries:

> Brazil is not, at present, a large producer of fish, when its population is taken into consideration. A long-range program has been drawn up, with the goal of a three-fold increase in the production and distribution of fresh, canned, and salted fish. This program envisages operation of an expanded fishing fleet, of receiving ports, and of refrigerated transportation and marketing facilities, with Government financial aid and supervision. It includes also technical and educational work to promote the sound development of the fishing industry.

Canada

ADDITIONAL FISHERY PRODUCTS REMOVED FROM EXPORT CONTROL: The number of products which require export permits has been reduced during the past year by the Canadian Government, according to the February 19 issue of Foreign Trade. In the latest relaxation, effective February 8, 1949, the following fishery products were removed from export control: fresh and frozen halibut, fish livers, cod liver oils, and sperm (whale) oil.

* * * * *

FISHERIES PRODUCTION, 1948: West Coast: Generally, landings of sea fish on the Canadian Pacific Coast during 1948 were at a high level, according to the February 1949 issue of the Canadian Department of Fisheries Trade News. Landings of herring were very large. However, those of salmon, halibut, and shellfish were lower than in 1947. (Table 1.)

The total landed value of fish, shellfish, and livers reached $31.7 million for the calendar year. This was a record for the British Columbia fisheries to date, being $9.4 million more than in the preceding year and twice the 1943 figure.

The higher prices paid for salmon were mainly responsible for the increase in total landed value.

SALMON: Catch of salmon amounted to 141.8 million pounds in 1948, 21 million pounds less than in 1947 and the lowest figure for several years. Canned salmon pack totaled 1.3 million cases, a relatively small figure. Disposition as fresh and frozen dressed, at about 40 million pounds, was 2.5 million pounds less, and the quantity filleted, at about 1.3 million pounds, was also slightly less than in 1947.

In 1948, the landed value of salmon was $20.1 million, as compared with $12.6 million in 1947. The average price to fishermen for all species of salmon was $14.15 per cwt. compared with $7.72 in 1947 and $8.55 in 1946.

HALIBUT: Landings of halibut, at 18.8 million pounds, were 5.3 million pounds less than in 1947 when special circumstances contributed to the high catch. Reference to earlier years indicates that the quantity taken in 1948 was at a satisfactory level. About 17.5 million pounds of the halibut catch were marketed fresh

or frozen. The production of steaks or fillets would seem to have been about 750,000 pounds, a sizable increase in this form over that of the last few years.

Table 1 - British Columbia Catch of Fish and Shellfish, 1947-48

	1948 1/		1947	
	Landings	Landed Value	Landings	Landed Value
Salt-water Fish and Shellfish:	lbs.	$ per cwt.	lbs.	$ per cwt.
Salmon	141,833,200	14.15	162,810,000	7.72
Halibut	18,878,200	15.08	24,119,300	16.11
Other flatfish	11,118,600	5.34	6,373,100	4.78
Herring	386,608,400	1.10	256,340,300	0.96
Groundfish	8,516,100	7.92	7,383,700	6.41
Tuna	2,171,600	28.24	796,500	26.57
Oysters	5,161,600	4.81	4,860,400	4.07
Clams	873,200	4.29	6,420,500	2.59
Other shellfish	1,968,400	9.65	1,980,700	8.12
Other seafish	735,800	4.10	4,564,400	2.64
Total salt-water fish and shellfish	577,865,100	5.12	475,648,900	4.32
Livers, etc:				
Groundfish	241,800	150.22	173,500	129.20
Halibut	304,300	83.79	353,200	96.43
Grayfish	3,355,300	32.80	3,759,300	28.94
Other	127,600	36.06	134,500	27.38
Viscera	586,200	21.50	595,600	17.90
Total livers, etc.	4,615,200	46.79	5,016,100	35.83
Grand Total	582,480,300	5.45	480,665,000	4.65

1/Preliminary figures.

OTHER FLATFISH: Catch of other flatfish--flounders, soles, etc.--reached 11.1 million pounds, an increase of 4.8 million pounds over 1947. Production of flatfish fillets was 2.5 million pounds and the quantity marketed dressed, 0.5 million pounds. A greater percentage of the raw fish was disposed of in the filleted form in 1948 than in 1947.

HERRING: The herring catch in the calendar year 1948, at 386.6 million pounds, was 130.3 million pounds greater than in the preceding calendar year. The landings were at an exceptionally high level in the first months of the 1948-49 season.

Table 2 - Production of Herring Products, British Columbia, 1946-48

Product	Unit	1948	1947	1946
Canned	In thousands of cases, 48 lbs. to case	416	1,412	1,318
Oil	In thousands of pounds	26,112	11,437	7,745
Meal	Tons	32,202	11,765	8,461
Dry salted	Tons	300	2,620	4,339

GROUNDFISH: The 1948 groundfish catch (including lingcod, sablefish, and the rockfishes) reached 8.5 million pounds with a landed value of $675,000. The previous year's catch was 7.4 million pounds, valued at $473,000. The production of fresh and frozen dressed groundfish totaled 5.6 million pounds (4.1 million in 1947), and filleted production amounted to 1.1 million pounds (0.9 million in 1947). With the exception of sablefish (black cod), a greater percentage of raw groundfish in 1948 was processed into fillets for marketing.

OTHER: Except for the clam production, which was drastically reduced in 1948 as compared with previous years, the production of shellfish was at a normal level. Total landings of all species last year amounted to 8.0 million pounds, as compared with 13.3 million pounds in 1947, with corresponding landed values of $524,000 and $475,000.

The tuna fisheries expanded substantially in 1948, yielding 2.2 million pounds landed weight and a value to fishermen of more than $600,000. Most of the tuna was canned. The total pack amounted to almost 60,000 cases (48 7½-oz. cans). Tuna canning may establish itself as a permanent phase of the West Coast fishing industry in the years to come.

The anchovy fishery was a failure in 1948, contributing only $5,000 in landed value, as against $71,000 in 1947.

East Coast: Landings of fish and shellfish on the Canadian Atlantic Coast in 1948 were generally heavy. Most significant was the increase in the catch of groundfish and of lobster over that of the previous year. Herring and "sardines" were the only important items to register a drop as compared with 1947 (Table 4).

The landed value for all fish, shellfish, and livers amounted to $30.9 million, $5.4 million more than in 1947. Higher landings of groundfish and of lobster, together with firmer prices for groundfish, "sardines," and some other species were the principal factors contributing to the increase in 1948 over 1947.

COD AND RELATED SPECIES: Landings of cod and related species (haddock, hake, etc.) totaled 351.1 million pounds in 1948, valued at $11.3 million. Although the catch was below the record levels of 1945 and 1946, it was quite satisfactory and substantially above that of the previous year.

The disposition in the fresh or frozen forms showed a substantial increase from 1947. The quantity marketed as fresh or frozen dressed was about 19 million pounds, compared with 15.2 million pounds in 1947. The production of fillets was about 47 million pounds, or 17 million pounds more than in the previous year. Of the total fillet production, cod accounted for 31.3 million pounds compared with 21.4 million in 1947. In 1945 and 1946, the production of cod fillets was 54.2 and 53.6 million pounds, respectively. This, however, occurred in years when landings were exceptionally high and European markets were taking large quantities of frozen fillets. Production of haddock fillets in 1948 was 14.6 million pounds, 6.6 million pounds more than in the previous year.

Table 3 - Canadian East Coast Production of Salted Groundfish, 1947-48

Salted Groundfish	1948 1/	1947
	(Quantities in millions of lbs.)	
Dried.....	37.0	40.3
Boneless	7.0	5.5
Wet-salted	9.7	5.7

1/ Estimated.

In 1948, about 1 million pounds more raw groundfish was salted than in 1947. A substantial increase was shown in the marketing of wet-salted groundfish and of boneless salted fillets. The production of salted fish in the final marketable forms is now believed to compare with that of 1947 (Table 3).

Production of smoked cod, haddock, etc., in 1948 was at about the same level as for the preceding year, i.e., approximately 9 million pounds. A very large decrease was registered in the production of the canned product.

LOBSTER: Landings of lobster reached 35.8 million pounds, with a landed value of $9.7 million. Although the catch was 4 million pounds higher than in 1947, it was still below the 1945 and 1946 catches (37.2 and 38.3 million pounds, respectively). In those years, higher prices resulted in higher values as well.

From year to year, the quantities of lobster marketed in shell or alive tend to increase. During 1948, about 21.5 million pounds were marketed in this form--

a record to date. In 1947, the quantity marketed in this form had amounted to 18 million pounds. Exports of "live" lobster increased substantially over the previous year. Production of chilled lobster meat amounted to 11 million pounds in 1948. The total pack of canned lobster last year, including lobster paste, appears to have been about 60,000 cases, compared with 54,661 cases in 1947.

CANNING LOBSTER MEAT IN A CANADIAN CANNERY

OTHER SHELLFISH: The 1948 clam production of 14.8 million pounds, although 3 million pounds less than in 1947, compared favorably with the levels of earlier years. The quantity marketed in the shucked form was only slightly below that of the previous year, while the quantities marketed in the shell and canned dropped substantially. The catch of oysters, at 55,000 barrels last year, showed an increase of 15,000 barrels over that of 1947. Prices were also very satisfactory. The catch of scallops, at about 83,000 gallons (shucked), was some 10,000 gallons below that of the preceding year.

HERRING: Catch of mature herring was low in 1948, particularly the second half of the year. The fall run, in fact, was almost a complete failure. Landings of 127.2 million pounds for the year were 10.2 million pounds lower than in the

Table 4 - Canadian East Coast Catch of Fish and Shellfish, 1947-48

	1948 1/		1947	
	Landings	Landed Value	Landings	Landed Value
Groundfish:	lbs.	$ per cwt.	lbs.	$ per cwt.
Cod	249,801,900	3.22	232,175,800	2.76
Haddock	51,544,100	4.55	31,557,600	4.34
Other groundfish	49,746,200	1.88	44,048,100	1.85
Total groundfish	351,092,200	3.22	307,781,500	2.79
Shellfish:				
Lobsters	35,866,300	27.14	31,884,000	25.95
Clams	14,873,700	2.17	17,948,000	1.92
Oysters	11,010,600	3.80	8,051,400	4.05
Other shellfish	1,074,000	42.38	1,595,200	28.65
Total shellfish	62,824,600	17.40	59,478,600	15.81
Other:				
Salmon	2,193,000	30.88	2,037,000	27.92
Halibut	2,320,200	19.68	1,917,500	20.63
Other flatfish	7,441,800	2.66	5,003,100	2.66
Herring	127,232,300	1.00	137,779,900	1.08
Sardines	89,777,600	2.47	101,586,000	1.53
Mackerel	25,249,500	3.99	26,262,900	3.17
Smelts	7,634,900	16.08	5,322,500	15.95
Swordfish	2,288,300	36.49	1,791,600	39.17
Other seafish	23,368,600	1.51	17,565,700	2.16
Total salt-water fish and shellfish	701,423,000	4.35	666,526,300	3.73
Miscellaneous:				
Cod and hake livers	5,524,500	3.78	5,478,700	3.14
Halibut livers	20,100	29.27	37,700	33.96
Other livers	86,600	21.80	149,700	10.21
Total livers, etc.	5,631,200	7.42	5,666,100	9.44
Grand Total	707,054,200	4.37	672,192,400	3.80

1/Preliminary figures.

previous year and 22.3 million pounds below those of 1946. However, in the early months of the year, large quantities of fresh herring were exported in the fresh form, so that the marketing of herring in that form is indicated as higher than in the previous year.

Production of kippered herring does not seem to have exceeded a million pounds. That of bloaters and bloater fillets appears to have been about 350,000 boxes (of 18 lbs. each) as compared with 475,000 boxes in 1947.

Production of pickled herring was substantially below that of 1947. However, more vinegar-cured herring was produced than in the previous year--approximately 18,000 barrels.

Landings of "sardines" (immature herring) were high at the beginning of the season but dropped in later months. Total landings for the year amounted to 89.8 million pounds, 11.7 million pounds below those of 1947. However, owing to higher prices in 1948, the landed value reached $2.2 million as compared with $1.6 million in the preceding year. The amount disposed of as fresh on the United States market dropped by about 8.4 million pounds and the production of canned sardines dropped by almost 200 thousand cases, as compared with 1947.

LOADING SARDINES FROM A WEIR TRAP INTO BOATS OFF NEW BRUNSWICK, CANADA. THESE WEIRS ARE FOUND ALONG THE SHORES OF SOUTHERN NEW BRUNSWICK AND THE STRETCH OF COAST EXTENDING FROM LUBEC TO ROBBINSTON IN PASSAMAQUODDY BAY.

FLATFISH: Catch of halibut on the East Coast was normal last year, about 2.3 million pounds. More significant was the increase in the landings of other flatfish (plaice, yellowtail, etc.) by 2.3 million pounds over the 1947 figure. The total quantities of flatfish (including halibut) marketed dressed, fresh or frozen, would appear to have been 3.9 million pounds, and the production of flatfish fillets was above 1.3 million pounds.

OTHER SEA FISH: Mackerel landings, at 25.2 million pounds, showed no important variation from the level of recent years. Production of pickled mackerel was slightly higher than for the previous year.

Salmon landings were only slightly higher than in 1947, the total of 2.2 million pounds being marketed in the fresh and frozen form.

The smelt fisheries were particularly successful in the latter months of the year. The commercial smelt fishery, of course, is a winter fishery, with highest catches in December and January. The total landings for the calendar year 1948 amounted to 7.6 million pounds, 2.3 million more than for the previous year. The Province of New Brunswick contributes about 70 percent of the annual landings.

The swordfish fishery had a satisfactory season in 1948, with landings amounting to 2.3 million pounds, marketed in the fresh or chilled form.

* * * * *

INVESTIGATION OF ATLANTIC COAST SEALS: An associate biologist of the Fisheries Research Board of Canada stationed at St. Andrew's Biological Station will be engaged in work in connection with the control of the harbour seal and also will investigate the seal fishery of the Atlantic Coast, according to the February 1949 issue of the Canadian Fisheries Department Trade News.

The director of the St. Andrew's Biological Station told the Atlantic Sub-Committee of the Board that there was urgent need for getting basic knowledge of the biology of the seal for conservation purposes, as well as need for studying means of reducing the numbers of harbour seals, which are considered to be predators of commercial fisheries.

There is evidence of growing interest in commercial sealing on the Atlantic Coast and for the adequate control and administration of this fishery. The results of the contemplated investigation are expected to be valuable.

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EAST COAST FISHERIES CONFERENCE: Some 200 representatives of fishing interests in eastern Canada and Newfoundland attended the third annual East Coast Fisheries Conference which was held in Halifax, Nova Scotia, on February 2-4, 1949, according to a February 15 report from the American Consulate General at Halifax. The Conference is sponsored by eastern Canadian organizations affiliated with the Fisheries Council of Canada and the wholesale trade centered in Montreal and Toronto.

The agenda of topics covered a wide field of East Coast fisheries problems. Discussion on the first day was on research. The second day was devoted to problems of the industry as related to interested agencies of the Federal Government; and to inspection and marketing matters. The final day was reserved for inspection of local fish plants and the holding of group discussions.

It appeared to be agreed among the various fish dealers and producers attending the Conference, that 1948 was one of the worst years on record for Nova Scotian shore fishermen. The high cost of fishing gear, coupled with the poor catch of last season, was creating difficulties for fishermen who need to replace worn-out equipment.

The Minister of Fisheries, speaking before the Conference, stated:

> "We have arrived, without a doubt, at a more decisive moment in our history. The pattern of world trade is changing and we are faced with a tightening up of many of our export markets. The action we take within the next year or two will determine whether the industry is to expand and prosper or whether it is to suffer a very serious setback."....

> The minister emphasized that Canadians are potentially the fishing industry's best customers, but so far the industry has just begun to meet their needs. "Our own Canadians could and would--if we cultivate their interest--provide for us a rich and reliable market for our products. They could guarantee for us a high level of employment and prosperity--if we give them half a chance.....
>
> "Through joint action of this kind to improve our methods of selling, merchandising and distribution, I am convinced that the domestic consumption of fish products in Canada can be doubled and perhaps trebled in the very near future. ...."

SALT FISH DEMAND EXCEEDS SUPPLY: The Canadian Department of Trade and Commerce reports that, although Canada's salt fish production has been maintained at a high level, demand in Western Hemisphere areas has been so heavy as to preclude the possibility of supplying possible European markets, according to a February 15 report from the American Consulate General at Halifax. Canadian trade representatives have been requested to refrain temporarily from active promotion of salt fish. Canada has been unable to fill European Recovery Program orders in sufficient quantities of desired types as defined by specifications and the alternative was to persuade the countries concerned to accept substitutes.

Colombia

SHARK LIVER OIL: Annual production of shark-liver oil in Colombia is reportedly about 2,205 pounds, according to the report, "Colombia as a Source of Crude Drugs and Essential Oils," issued January 1949 by the Office of International Trade of the Department of Commerce. In 1947, arrivals of raw fish livers from Colombia in the United States totaled 41,763 pounds, valued at $9,826.

* * * * *

SHRIMP REPORTED IN COLOMBIAN WATERS: A member of the Danish Biological Institute in Copenhagen, who recently returned to Denmark from Colombia, has investigated the possibilities for an expansion of the fishing industry in Colombia, according to the British periodical, The Fishing News, dated February 19.

The investigations, which were financed by the Colombian Government, proved that enormous quantities of shrimp exist off the Colombian coast. It is reported that a Danish firm has already decided to spend approximately $1,000,000 to build a canning factory in Colombia.

Costa Rica

RULES AND REGULATIONS TO MARITIME FISHING AND HUNTING LAW: The Government of Costa Rica has enacted Decree No. 363, "Rules and Regulations to Law No. 190[1/] of September 28, 1948, on Maritime Fishing and Hunting Law," dated January 11, 1949, published in the Diario Oficial of February 3, 1949; Decree No. 414, dated February 4, 1949, published in La Gaceta--Diario Oficial of February 27, 1949, which amends certain of the tax and fee provisions of Decree No. 363; and Decree No. 426, dated March 8, 1949, published in La Gaceta--Diario Oficial of March 13, 1949,

1/ See Commercial Fisheries Review, February 1949, p. 40

amending Article 9 of Decree No. 363.

The decrees consist mainly of certain rules, regulations, taxes, and fees for fishing off Costa Rica. It will affect shark fishing and tuna fishing (both bait boats, purse seiners, and tuna motherships). The law does not reassert Costa Rican sovereignty beyond the three-mile limit, but its implications are that it may be enforced within the 200-mile limit over which Costa Rica has claimed sovereignty. Decree No. 414 changed Articles 27 through 32 of Decree No. 363 eliminating the discriminatory taxes and fees established by the latter Decree, changing the basis of certain taxes, and making other minor changes that clarify provisions of the law. Decree No. 426 modified Article 9 in that authority for maritime fishing and hunting may be granted by the Ministry of Agriculture and Industries for one-year periods. The certificate, "Annual Registration of Craft," issued to fishing craft is not transferable and will show the type of fishing authorized.

Because Decree No. 414 made no provision to the contrary, it is assumed that all Decrees entered into effect on the date Decree No. 363 went into effect, March 9, 1949.

The following is a summarization of the decrees with a few of the more pertinent articles of interest to the United States fishing industry given in full:

Article 1. Classifies marine fishing as follows:

(1) Short Distance Fishing, that which is done by ships that go no more than 12 miles from the coast;
(2) Medium Distance Fishing, that which is done by ships that go out to sea more than 12 miles and less than 200 miles from the coast.
(3) Long Distance Fishing, that carried on by ships that go more than 200 miles from the coast.

Articles 2 through 8 are general ones which define different types of fishing, methods of fishing, and types and use of equipment and gear. All such items as "ordinary nets, flexible nets, cables provided with floats, lines or heavy bodies that extend in any direction in the sea" are classified as fishing equipment. Fishing methods are classified as double craft; otter trawl; purse seine; pole, line and bait system (tuna fisherman); "hand nets with lines to shore"; drifting floating equipment; and fixed gear. All of the above, including all types of lines, are legal and permitted. Purse seine nets shall not have the mesh (bar) smaller than 70 mm. (2.76 inches), and they will not be over 450 meters (1,476 feet) in length. However, the use of longer nets will be permitted with the payment of a special tariff per additional lineal meter. The minimum opening of the mesh (bar) used with double-craft and otter-trawl systems will be 35 mm. (1.38 inches).

Article 9. Establishes a closed season from July to November on sardines in the Gulf of Nicoya and Golfo Dulce, forbids the catching of porpoise, the use of equipment not authorized by the current regulations as well as the use of explosives, chemical or poisonous products and, except for operations from the land, forbids the use of dragnets within a six-mile limit.

Article 10. Deals with the registration and documentation of fishing craft. It also specifies documents, receipts, and certificates that must be carried by every company and physical or juridical person engaged in fishing or in the fishing industry. The following certificates are included: certificate of inscription in the Registry to be maintained by the Ministry of Agriculture and Industries through the Department of Fishing and Conservation; original certificate of payment of the Annual Registration Fee in the case of craft in general; certificate that all members of the crew possess their "Fisherman's License", in the case of fishing craft with their base in the national ports; original certificate of having paid the Annual Bait-fishing Tax, in the case of shark or tuna (pole and line) fishing craft; original certificate of having paid the Fishing and Export Tax, in the case of craft that do not deliver their catch to motherships or floating plants anchored in Costa Rican waters, or to plants established on the national territory; and original certificate of having paid the Export Tax, in the case of motherships or floating plants.

Articles 11 through 13 deal with infractions of the rules and regulations. Practices which are considered as infractions are specified and classified under the two general classifications of "minor" and "serious".

Articles 14 through 18 establish the amount and kind of penalties that may be imposed and the rules for the administration of this part of the law.

Articles 19 through 25, under the heading "General Dispositions", rules and regulations are laid down about disposition of catch and certain personnel requirements are established:

Article 19 states that craft of national registry selling their products abroad must obtain a permit from the Department of Fishing and Conservation, shall pay the corresponding export taxes and that if such craft belong to national companies they shall be subject to the provisions of the Law of Control of Export Products.

Article 20 exempts fish caught by craft of Costa Rican registry with a Costa Rican crew from all taxes, if the catch is discharged in Costa Rican territory for consumption or industrialization in the country; and that if the fish is transferred to motherships or factory ships, or reembarked for exportation, the catch shall be exempt only from tax applicable to the fishing craft.

Article 21 states that all national fishing craft must sell their catch to packing or refrigerating companies established in the country provided that the price paid by these is not lower than that paid by motherships or factory ships.

Article 22 states that packing or refrigerating plants may not export unprocessed fish, directly or indirectly, as long as such material is needed to maintain local production uninterrupted.

Article 23 states that all persons engaged in fishing from aboard national or foreign craft must register with the Bureau of Embarkation of the Department of Fishing and Conservation, and that ship owners or their representatives must apply for necessary men for their crews to this office, and that these men may be chosen from existing lists.

Article 24 specifies that a sailor must possess a permit issued in his name by that Bureau before he may embark, that if this requirement is not complied with, both the captain of the craft and the sailor himself will be punished.

Article 25 specifies that captains of motherships and factory ships, before sailing, and the managers of land plants, monthly, must make sworn declarations showing the quantity of fish received; the name of the fishing craft and of its captain; and the prices paid.

Article 26, under the heading "About Registration Fees, Taxes and Their Payment", states that all taxes and duties established in the law must be paid to the Office of the Collector of Revenue or to its branch offices, or to authorities appointed for that purpose by the Ministry of Agriculture and Industries.

Article 27. Establishes the fee for annual registration of vessels in U. S. dollars and states that national ships may pay the equivalent in colones at the official rate. Every ship engaged in fishing, or in the transportation or commercialization of its products, must pay an annual registration tax valid from the date of issuance and according to the following scale:

(1) Shark-fishing craft - $200.00 (U. S.)
(2) Tuna purse seiners - $250.00 (U. S.)
(3) Tuna bait-fishing craft - $125.00 (U. S.)
(4) Motherships or plants - $500.00 (U. S.)

Article 28. Provides that the fishing tax for shark and tuna will be paid in advance, in accordance with the net tonnage of each craft. This tax will be assessed in accordance with the following tariff:

(1) Shark-fishing craft which deliver their load directly abroad, $2.00 (U. S.) per net ton of fish capacity, for each voyage not exceeding three months.
(2) Shark-fishing craft which deliver their load to motherships or plants, $2.00 (U. S.) per net ton of fish capacity, each four months.
(3) Tuna-fishing craft carrying their load directly abroad, $2.50 (U. S.) per net ton of fish capacity, for each voyage not exceeding six months.
(4) Tuna-fishing craft which deliver their load to motherships or plants, $2.50 (U. S.) per net ton of fish capacity, each three months.

Article 29. All bait-fishing craft shall pay a tax of $250.00 (U. S.) per year.

Article 30. The Export Tax on tuna and shark shall be assessed in accordance with the following tariff:

(1) Shark-fishing craft carrying their load directly abroad, $4.00 (U. S.) per ton of fish, for each voyage and payable in advance.
(2) Tuna-fishing craft carrying their load directly abroad, $4.00 (U. S.) per ton of fish, for each voyage and payable in advance.
(3) Motherships or plants, $4.00 (U. S.) per ton of fish.
(4) Land plants, $2.50 (U. S.) per net ton exported.

Article 31. Provides that fishermen from craft which deliver their catch to motherships or plants must obtain a Fisherman's License valid for one year and for which they will pay a tax of $15.00 (U. S.).

Article 32. The tax on nets will be in accordance with the following tariff:

Per lineal meter of each net in excess of 650 meters, (2,133 feet), $1.00 (U. S.) per year, payable in advance.

Denmark

FISHERIES REVIEW, 1948: Production: The Danish fishing industry in 1948 was favored with unusually large catches, according to a February 10 report from the American Embassy at Copenhagen. In weight, they exceeded the unprecedented large 1947 catch by about 30 percent. Danish fishery expeditions to Greenland and Iceland waters took place for the first time in 1948 and were aimed at permanently expanding Danish fishing operations.

Exports: The export of fishery products of all kinds brought large amounts of foreign exchange to Denmark. This income in 1947 amounted to $36,257,598,[1/] but was increased in 1948 to about $39,383,253, an increase of about 9 percent.

Trade Agreements and Exchange of Products: As Denmark was obligated under its bilateral trade agreements, especially with the United Kingdom, to export most of its agricultural produce, fishery products became of increasing importance to the Danish economy when negotiations with other countries for the exchange of products were in progress. However, export quotas necessary to meet obligations under completed bilateral agreements proved to have been set too high, despite

1/Rate of exchange: U. S. $1.00 = 4.799 Danish crowns (par value).

increased catches of fish, and towards the end of the year, export to certain non-treaty markets had to be curtailed.

Canning: There was increased activity in industries dependent on fishing. Existing fish product factories and canneries were expanded, new ones began operations, and new lines of production were started.

Fishing Fleet: The fleet of fishery vessels was not increased to any extent, but a considerable amount of repair and modernization work, particularly on marine engines, was performed.

Independent Ministry of Fisheries: The year 1948 was the first complete year during which an independent Ministry of Fisheries was in operation. This Ministry has been very active in the interest of the fishing trade and its affiliated industries. It was instrumental in establishing a national propaganda committee for the consumption of fish during the year and took the initiative in having fishery attaches sent to a number of Danish missions abroad.

* * * * *

NEW FLOATING TRAWL NET: A new floating trawl was actually tried by several fishing vessels in November 1948 and reports state that it proved successful, according to the February 19 issue of the British periodical, The Fishing News. The floating trawl, the idea of a Danish fisherman, Robert Larsen, has been in the experimental stage for the past 13 years. However, a Swedish fisherman claims that the same type of trawl is being made in a factory in Gothenburg, Sweden, and that it was invented in Sweden first.

Since the new floating trawl can be pulled or drawn through the water at a higher level free of the sea bottom, it will be suitable for catching herring and mackerel. The inventor also intends to experiment with a heavier type of floating trawl for catching cod. The cost of the new floating trawl is estimated at approximately $700.

With the use of an echo-sounder, it will be possible to determine at what depth to fish the trawl, which can be set an any desired depth. Secured between two boats and pulled for about 15 minutes, the new trawl is then handled like a regular otter trawl.

Ecuador

NEW LAW GOVERNING FISHING AND ESTABLISHMENT OF FISH PROCESSING PLANTS: The Decree passed by the 1948 session of the Ecuadoran Congress concerning fishing in Ecuadoran territorial and insular waters and the establishment of fish processing plants in Ecuador became effective with its publication in Registro Oficial No. 101, dated January 4, 1949, according to a January 18 report from the American Embassy at Quito.

The new Decree does not revoke the existing laws and regulations governing fishing in Ecuadoran waters, but rather confirms certain regulations about which there was considerable discussion and adds to them basic regulations to govern the signing of contracts with fishing and fish processing enterprises. Before the

draft of the present Decree was presented to Congress, and during the time it was under discussion in that body, Ecuador's policy with regard to fishing in its waters was the subject of bitter controversy between two groups who held opposite viewpoints on the subject of fishing with nets. The text of the Decree, as passed by Congress and as finally approved by the President of the Republic, is a compromise between the positions of the opposing groups.

A summarization of the main features of the Decree follows:

Article 1 of the Decree confirms the policy of permitting both bait and net fishing, specifically mentioning "purse seiners" and "motherships," and provides that the product of the fishing may be disposed of freely. However, the first part of this article is modified by the second paragraph of Article 3, to the effect that, after two years' trial, the Executive may prohibit partially or completely either system, if he finds it destructive, and the second part is subject to the requirement set forth in Article 4 that the Executive is obliged to issue a regulation for the progressive establishment of a fish-processing industry in the country, requiring, at the end of four years, that all fish caught in Ecuadoran waters be processed in Ecuador.

Article 2 states that licenses shall be issued after the formalities prescribed in the Regulation issued with Decree No. 1206-A, of July 2, 1948, have been fulfilled, and shall include the right for fishing vessels of the two systems to fish for a period of 90 days and motherships to take on a full load once on each trip. These provisions will be rigorously enforced.

Article 3, in addition to the modification it places on part of Article 1, authorizes the renewal of licenses if damage to vessels or gear prevents fishing for the period covered by the license.

Article 5 grants certain tax exemptions to new processing industries which establish factories, canning or refrigerating plants, etc., in Ecuador.

Article 7 seems to grant to exclusively fishing enterprises (as distinguished from canning or processing enterprises) a period of two years' grace, counted from the initiation of their activities, before they have to submit to the requirement that the product of their fishing be processed in Ecuador, and furthermore introduces the provision that the Government shall determine whether all or part of the fish caught must be processed in Ecuador after consideration of the needs of the national industry.

Other sections of the Decree establish a new validity period for fishing licenses, charge the Ecuadoran consular authorities with the enforcement of the licensing requirements, provide for the distribution of the proceeds from fishing taxes, grant the Executive authority to prohibit factory ships, and make him responsible for carrying out a strict watch over the country's waters to safeguard the national interest therein.

This Decree does definitely establish a new policy of the Ecuadoran Government with regard to fishing in its territorial and insular waters--that of requiring the processing in Ecuador of fish caught in Ecuadoran waters. Interpretative regulations to follow or actual application of the Decree will probably clarify certain parts of the Decree and will reveal the effect of the new policy on American fishing interests.

Iceland

COMMERCIAL AGREEMENT WITH THE NETHERLANDS: On December 17, 1948, in The Hague, a commercial agreement between the Netherlands and Iceland was signed. The agreement calls for an exchange of goods during the year ending November 30, 1949, valued at $5,600,000, according to a January 14 report from the American Legation at Reykjavik.

Icelandic sales to the Netherlands will consist mainly of various types of meal, cod liver oil, quick frozen and salted fish fillets, and fish skins. The Netherlands will sell a variety of products (no fishery products included) to Iceland.

Proposed Icelandic Exports of Fishery Products to the Netherlands (Dec.1,1948-Nov.30,1949)

Product	Quantity or Value	Product	Quantity or Value
Herring meal	- 30% of the entire 1948-49 winter production in which quantity the 25% already contracted for is included. 3,000 metric tons.	Offal meal	- 280 metric tons
		Cod liver oil	- 800 " "
		Salted fish fillets	- 4,000 barrels
Fish meal	- If fish meal is not available to the full quantity, the balance will be delivered in herring meal.	Fish and fur skins	- $96,009
		Quick frozen cod fillets	- 4,500 metric tons

DISPUTE BETWEEN SEAMEN'S UNIONS AND TRAWLER OWNERS: The early part of February 1949, the Icelandic trawler owners announced through their Association the discontinuation, effective February 11, of the payment of war risk bonuses to the officers and crews operating trawlers, according to a March 3 report from the American Legation at Reykjavik. The seamen's unions are unwilling to accept the elimination of the bonus which they consider as an integral part of seamen's wages. Because of this dispute between the seamen's unions and the trawler owners, no trawlers sailed from Reykjavik after February 17.

The special war risk bonus mentioned is paid only to officers and members of the crew who make the trip to German and British ports. The officers generally make every trip, whereas deckhands make, on the average, four trips per annum. The annual bonus for the captain and officers amounts to approximately $5,390 each and for deckhands, $1,232. In addition to the war risk bonus, the crew as well as the officers are paid a basic wage, and all share in the liver oil proceeds. A deckhand's annual wages range between $5,082-6,776; captains average $23,100; mates, $15,400; engineers, stokers, and radio operators each average $12,320. (These wages consist of a basic wage multiplied by the cost of living index of 300, a percentage of the liver oil proceeds, and the war risk bonus.) The assistant cook, usually a young boy, receives only a basic wage multiplied by the cost of living index.

Negotiations are being carried on between members representing the Icelandic trawler owners and the labor representatives of the seamen's unions. Both parties agreed to the appointment of a Government mediator, who is assisted by a member of the Ministry of Industries and a Supreme Court judge. This board is endeavoring to draw up an agreement which will reconcile the two parties in the dispute.

In recent years, the operational cost of trawling has mounted. Consequently, in order to continue the operation of trawlers fishing for iced fish, which

in 1948 was Iceland's most important export product (about $13,860,000), the trawler owners decided to eliminate the war risk bonuses, which they consider no longer applicable in peacetime. Iced fish exports are not subsidized by the Government. The tie-up is a test which, if the trawler owners succeed, may be a prelude to a gradual lowering of the seamen's wages to bring them more into line with wages paid to persons engaged in other industries. Indications are that an agreement will be reached only after protracted negotiations. Although they are the highest paid workers, the seamen are extremely reluctant to accept a cut in their compensation. As of March 2, 18 new "reconstruction" trawlers and one old trawler have put into port and remain idle, out of a total of 29 "reconstruction" and 18 old trawlers.

NOTE: Values converted to U. S. currency on basis of 1 kronur equals 15.4 cents U. S.

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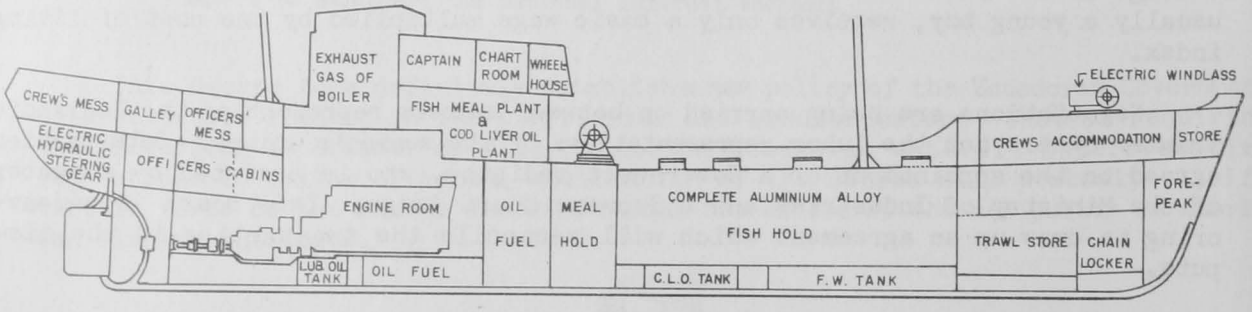
NEW TRAWLER WITH FISH MEAL AND OIL PLANT ABOARD: A new Icelandic trawler, Jorundar, was launched at Lowestoft, England, early this year, according to the February 12 issue of the British periodical Fishing News.

Several improvements have been incorporated in its construction, and it is more than a fishing vessel because it contains a complete fish meal and liver oil extracting plant aboard.

The vessel's length is 167 feet; breadth, 28 feet; depth, 15 feet; gross tonnage, 470 metric tons; and estimated service speed, 12 knots. Using diesel engines, some of the outstanding features are: a superstructure of non-corrosive aluminum alloy; a fish hold (12,000 cubic feet) constructed of and lined with non-corrosive aluminum and standardized aluminum pen "boards"; and a hydraulically-operated trawl winch (consisting of two drums each taking 1,200 fathoms of three-inch warp) reported to be the largest of its kind on any fishing craft.

Capacity of the fish hold is 518,000 pounds. The fish meal plant can produce 23 metric tons of ground fish meal from the fish waste, which is bagged and stored in specially constructed meal holds. It can produce as much as 10 metric tons of meal every 24 hours. A steam-operated liver oil plant produces 20 metric tons of liver oil per trip. When extracted, the oil is stored in separate, specially constructed tanks. Large capacity electric pumps discharge this cargo immediately on arrival in port.

Accommodations for captain and crew include hot and cold running water and showers, mess room, and lounge. Accommodations throughout the vessel are air conditioned.



PROFILE OF NEW ICELANDIC TRAWLER

REVIEW OF FISHERIES, 1948: Importance of the Fisheries: The total fish catch in 1948 amounted to 409,208 metric tons, five percent less than in 1947, according to February 10 and March 1 reports from the American Legation at Reykjavik. This represents the largest catch per capita of any nation in the world and places Iceland third among European countries in over-all fish production (following Norway and the United Kingdom). Other industrial resources in Iceland are practically non-existent, and the possibilities of agricultural development are limited, chiefly by the climate. As a result, Iceland must export the products of its fisheries in order to import most manufactured articles and many basic foodstuffs, such as grain. Fish and related products constituted 92 percent of all Icelandic exports in 1948.

Fish Production and Utilization: There are two major types of fishing in Iceland: the cod fisheries (including other white fish) and the herring fisheries. The utilization of the fish has varied considably over recent years (Table 1 and Figure 1).

Cod Fisheries and Fleet: The cod fisheries are carried on by large trawlers on the high seas and smaller craft (including motor boats) off the coasts of Iceland (Table 2).

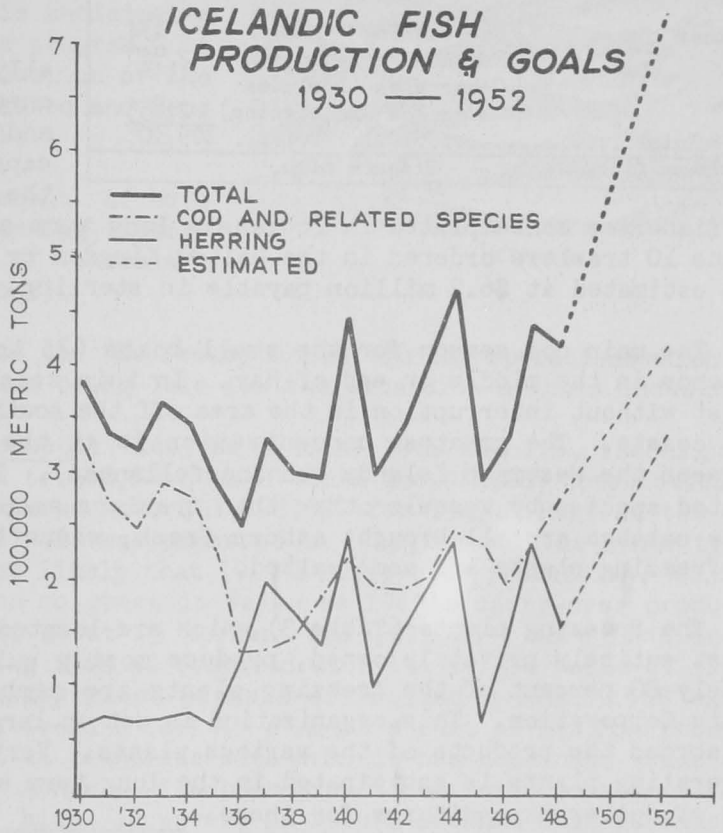


FIGURE 1 - OVER-ALL ICELANDIC FISH PRODUCTION, AND COD AND HERRING PRODUCTION FOR 1930 THROUGH 1948. INDICATED ARE THE GOALS FOR 1952 UNDER ICELAND'S LONG TERM ECONOMIC PROGRAM.

The trawlers usually operate the year around. They place their catch on ice (after removing the livers for oil) and take the fish directly to foreign markets (United Kingdom and Germany). Fish livers are processed aboard the trawlers and the oil brought back to Iceland to be combined with the oil from the fish brought in by the small boats (oil is not processed on small boats). In the year 1948, the trawler catches amounted to 143,000 metric tons as compared to 72,000 in the preceding year and 60,000 in 1946. This great increase was caused by the rebuilding of the trawler fleet which has been going on since the end of the war.

The average catch of the new trawlers has been approximately 265 metric tons compared to around 148 metric tons for the old trawlers.

There are at present 18 old and 28 new trawlers in Iceland. Four more are expected during the beginning of this year, which will complete the original order for 32 placed in the United Kingdom in 1945. In October 1948, the Icelandic

Government placed orders for 10 more (8 to be built at Aberdeen), and two additional ones have been ordered by private owners. These 12 new orders are not expected to be completed until 1950 and 1951. These trawlers are to be 183' 6" in length, 1200 hp. motor, and an estimated speed of 13 knots. Each vessel's fish hold will have a capacity of 840,000 pounds. The vessels are to be fitted with the most modern navigational equipment, including wireless, telephones, direction finders, depth sounding apparatus, and radar.

Table 1 - Iceland's Fish Production and Utilization, 1948

Species	Utilization	Metric Tons
Cod (and other white fish)1/	Fresh, on ice	154,365
	To freezing plants	76,424
	For wet salting	28,070
Herring2/	For salting	14,255
	For oil and meal	129,861
Other	For canning	434
	For home consumption	2,940
	Other uses (includes some cod and herring)	2,855
Total		409,204

1/Drawn fish. 2/Whole fish.

The new trawlers are gradually intended to replace the old ones (which operate at a loss), and the development of the fishing capacity of the trawler fleet is the major undertaking related to the fisheries contemplated in Iceland's long term economic program. Total cost of the 10 trawlers ordered in the United Kingdom by the Icelandic Government has been estimated at $6.2 million payable in sterling.

The main cod season for the small boats (25 to 100 GRT) starts in January and ends in the middle or end of May. In this season, fisheries are carried on almost without interruption in the area off the south, southwest, west, and northwest coasts. The greatest concentration is at the south and southwest coasts (between the Westmann Islands and Snaefellsness). In 1948, the catch of cod and related species by vessels other than trawlers amounted to 116,000 metric tons. These catches are all brought ashore fresh, where the greater part is taken to the freezing plants and some salted.

The freezing plants (Table 3) which are located all around the coast and are almost entirely privately owned, produce mostly quick frozen fillets. Approximately 80 percent of the freezing plants are members of the Iceland Freezing Plants Corporation. This organization is set up largely for the purpose of marketing abroad the products of the various plants. Very little expansion of the refrigerating plants is anticipated in the long term economic program. Total estimate of dollar expenditures for these constructions for the period 1949-50 to 1950-52 is $170,000.

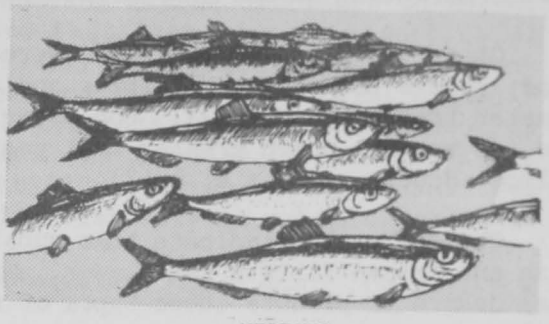
Table 2 - Icelandic Fishing Fleet by Types and Size, 1948

Type and Size	No.	Gross Registered Metric Tons
Trawlers	46	25,653
Other fishing vessels (steamers)	11	2,583
Motor vessels:		
More than 100 GRT	44	6,423
35-100 "	201	12,074
12- 34 "	213	4,161
Under 12 "	136	981
Total	651	51,875

Herring: Up to 1946, there was only one main season for the herring fisheries: the period from July to September, off the north coast of Iceland. During the winter of 1946-47 and particularly 1947-48 (Nov. to Jan.), herring was caught in great quantities off the southwest coast (particularly around Hvalfjordur). The 1948-49 winter season, however, was a total failure. Herring fisheries are carried on, for the most part, with purse-seine nets by the smaller boats. These craft (Table 2) are able to convert from one type of fishing to the other as the cod and herring seasons do not generally coincide. Herring

from both the summer and winter catches is processed into oil and meal. Salted herring has, up to the present, been produced almost entirely during the summer season owing to the better quality of the summer fish.

Most of the larger herring processing plants (which reduce herring into oil and meal) are located in the north, around Siglufjordur and Akureyri (Table 4). In view of the record winter catch of 1947-48, it was decided to expand processing facilities in the south and to build a floating herring factory. Most of the 2.3 million dollar ECA loan taken by Iceland in 1948 was used for this purpose, and the floating herring factory, Haeringur, is now ready for operation. No further significant development of herring processing plants is anticipated in the long term economic program. A great part of the 1948 production of the summer herring catch was salted and less processed into oil and meal.



HERRING

Canning: A small amount of both herring and cod go to the canning factories. The most important of these are located in Reykjavik (Table 5).

Whaling; The year 1948 saw the resumption of whaling operations which proved highly successful. Plans are being laid for the expansion of this industry.

Exports of Fishery Products: Iceland's total 1948 exports, the highest in Icelandic history, amounted to $60,826,724 of which $56,944,286 constituted fishery products (Table 6), compared with $41,128,687 for 1947. Part of the winter herring oil production (1947-48) was exported in 1948, as well as other types of fishery products. It is not likely that 1948's carry-over production, which will be exported in 1949, will be so great in value as 1947's carry-over production, exported in 1948. In value, about 25 percent ($15,371,253) more fish and fish products were exported during 1948 as compared with 1947. The value of fish exports tends to present an exaggerated picture of Iceland's total 1948 exports. Iceland markets a sizable part of its fish production in countries with which it has concluded trade agreements. The prices on these markets are relatively high. However, in return Iceland must purchase from these countries high-priced commodities.

Table 3 - Iceland's Freezing Plants, 1948

Plants	Production Capacity per 16 hrs.	Storage Capacity
No.	Metric Tons	
74	881	35,700

Fish on ice was Iceland's most important export product. The United Kingdom, Iceland's best customer, and Germany were the only importers of this product. The new reconstruction trawlers were solely responsible for effecting such a tremendous (more than double that of 1947) increase in the catch of fish. The old trawlers will gradually be replaced by new modern diesel-powered and steam trawlers (Table 2).

Next in importance was herring oil exports which were about 50 percent greater than that of 1947. The larger part of the output was exported to the United Kingdom, Germany, and the Netherlands. The unusual 1947-48 winter herring catch was responsible for the large herring oil production. Unless the 1949 summer herring catch is extraordinarily large, the 1949 output will be considerably lower than that of 1948, because of the exceptionally poor 1948 summer and 1948-49 winter herring catches.

Table 4 - Iceland's Herring Plants, 1948			
Plants	Production Capacity per 24 hrs.	Storage Capacity	
		Meal	Oil
No.	Metric Tons		
23	15,443	59,250	63,000

Frozen fish fillets was Iceland's third most important fish export commodity. The production was slightly less than that of 1947. The United Kingdom, Czechoslovakia, and the Netherlands received the greater part of the export production of frozen fish. The production of frozen fish could be easily stepped up provided the export prices were increased. Unfortunately, the Icelanders have been encountering difficulties in marketing abroad this particular type of fish.

Table 5 - Iceland's Canning Factories, 1948	
Plants	Production Capacity
No.	No. of Cans per Day
8	124,000-137,000

Other important fish exports were: herring meal (last year's production was three and one-half times greater than that of 1947); cod liver oil (the production was one-third greater last year than in 1947); and salted herring exports (almost double exports of 1947).

The statistics indicate that subsidized fish export products, such as salted fish and frozen fillets were lower, particularly the former, a sign that there is less desire to produce these types of fish products which the Government must subsidize.

Outlook for Fisheries: As all fish catches (particularly herring) are highly unpredictable, it is difficult to make any long-range forecasts (Figure 1).

Table 6 - Iceland's Exports of Fishery Products and Quantity Exported to United States, 1948

Product	Total Icelandic Exports				Quantity Exported to United States			
	1948		1947		1948		1947	
	Metric Tons	Value	Metric Tons	Value	Metric Tons	Value	Metric Tons	Value
Fresh Fish:								
Herring	2,937	$ 176,999	842	$ 62,758	-	-	-	-
Other	125,401	13,913,483	61,312	6,569,993	-	-	-	-
Frozen Fish:								
Herring	1,097	158,356	25	5,975	-	-	-	-
Other	22,240	9,799,864	25,437	10,640,012	1,935	$ 585,519	1,086	$ 364,555
Salted Fish:								
Herring	11,019	3,510,348	6,603	2,038,760	1,016	378,762	540	217,624
Other, prepared	1,506	635,606	300	121,900	-	-	-	-
" ,unprepared	13,309	3,721,990	26,600	7,134,377	24	5,867	5	1,745
" ,pressed	173	56,004	-	-	-	-	-	-
" ,in barrels	404	129,290	-	-	-	-	-	-
Fish wings	867	194,447	23	5,907	-	-	-	-
Fish Meal:								
Herring	34,118	5,453,048	11,155	1,667,780	7,000	1,051,125	420	57,453
Other	5,499	918,608	5,467	861,841	-	-	-	-
Oil:								
Herring	28,336	11,444,240	20,527	7,977,121	-	-	-	-
Cod liver	8,035	5,184,619	5,407	3,521,010	2,982	1,956,092	2,152	1,470,776
Whale	773	330,194	-	-	-	-	-	-
Canned Fish:	959	647,348	340	222,346	90	59,720	114	98,123
Miscellaneous:								
Fish, dried	6	2,088	1/	550	6	1,719	-	-
Roe, frozen	107	22,042	4	645	1	302	-	-
Roe, salted	1,000	199,697	1,621	297,712	4	1,331	2	1,241
Whale meat, frozen	864	443,433	-	-	-	-	-	-
Fish skins, salted	3	2,582	-	-	-	-	-	-
Total.....	258,653	$56,944,286	165,663	$41,128,687	13,058	$4,040,437	4,319	$2,211,517

1/Less than a metric ton.

Herring catches in recent years make it appear somewhat unlikely that the goal for herring can be achieved. If the herring show up, however, there should be no production or marketing problems. Facilities for processing, in both the north and south of Iceland, are now well developed, and the market is likely to remain good.

Catches of cod and other white fish, as a result of the planned addition of new trawlers, should continue to increase. The goals set for 1952, however, may again be somewhat optimistic. Production facilities for salted, iced, and frozen fish should be adequate, but the marketing problems may be difficult to solve. A fish working party of the OEEC has estimated that there may be a surplus of demersal fish in 1952. Whether this will actually materialize depends on many intangible factors such as (a) whether Iceland and other nations will actually achieve the production goals planned in their programs, and (b) the extent to which the consumption of fish can be increased. In the case of Iceland, it is unquestionable that the country's continued ability to export large quantities of fish represents its only chance of achieving viability at anything close to its present standard of living.

NOTE: Rate of exchange used for conversion of values based on 1 kronur equals .154 cents U.S.

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STATEMENT ON INTERNATIONAL NORTHWEST ATLANTIC FISHERIES CONVENTION: In a news release giving information about Iceland's participation in the Northwest Atlantic Fisheries Conference held at Washington, D. C., January 26 to February 8, 1949, the Icelandic Foreign Office stated that Iceland's action in signing the Convention agreed to at the Conference is not incompatible with the execution of the Icelandic laws governing protection of the coastal shelf inasmuch as the convention "has differentiated between the limits of territorial waters and the jurisdiction of a coastal state over fisheries, even though these fisheries are outside territorial waters," according to a March 2 report from the American Legation at Reykjavik.

The release continues: "In many respects the agreement coincides with the agreement concerning the size of meshes, etc., signed in London on April 5, 1946, which is to be in force for the area east of 42nd degree of Western longitude." However, Iceland has not found it possible to sanction the London Agreement because it has not been possible to get a decision as to whether participation in the Agreement is compatible to the execution of Act No. 44 of April 5, 1948, concerning the protection of fishing grounds on the coastal shelf. It was thought possible that such participation by the Icelanders might be interpreted as an admission on their part that no unilateral protective measures could be effected outside the virtual territorial waters.

With reference to the latest Convention, the press release further states: "This is the first time that an international agreement has differentiated between the limits of territorial waters and the jurisdiction of a coastal state over fisheries, even though these fisheries are outside territorial waters. Participation in this agreement cannot, therefore, be considered incompatible with the execution of the Icelandic laws on the protection of the coastal shelf, although such execution naturally has not been granted the approval of the contracting Governments."

India

FISHERIES REVIEW: The fisheries of India, potentially rich, have not as yet been fully exploited. Fishing and fish trade have historically been relegated to a class of people socially inferior and lacking both finance and education to improve the industry. Nevertheless, considerable progress has been made in recent years as a result of the zeal and initiative of the provincial fisheries departments, according to the report, "Marketing Areas in India," issued by the Office of International Trade, Department of Commerce, in December 1948.

The Provinces of Bengal (East and West) and Orissa in the Calcutta marketing area have extensive supplies of fish. In Bengal, about 2 percent of the population are engaged in fishing and its connected trades. Fresh-water and estuarine fishing are the most important in this region, sea fishing having been little exploited. The most important inland commercial fish is the hilsa (Hilsa ilisha). Other river and tank fishes are the rohu (Labio rohita), the katla, and mrigal (Cirrhina mrigala). Large supplies of bhekti (Latas calcarifer) are available from the estuaries along the Sunderbans. Foreign trade in fish from this area is unimportant. With the exception of some dried fish (salted or unsalted) exported to Ceylon, there is little shipment to other countries.

The food situation in South India has necessitated exploitation of the available fisheries. Methods used, however, are not modern and there is much waste. Coastal waters provide a potential source of food fish and Government authorities are planning the development of an organized, modern industry.

Bombay Province and the Indian States of Gujerat and Kathiawar in the Bombay marketing area have been favored with a long coast line which abounds with suitable bases for the fishing craft. Deep-sea fishing continues throughout the year except during the months of June, July, and August when the southwest monsoon is severe. Over 100,000 metric tons of fish are reportedly caught every year by fishermen of the Bombay Province. To provide quick transportation of the fish to consuming centers, the Bombay Government has a fleet of 17 motor launches. A total of 3,000,000 pounds of fresh fish was brought by these launches to Bombay during the year ended March 31, 1946. Mackerel, catfish, pomfrets, Indian salmon, tuna, and sardines are some of the important kinds caught in the Arabian Sea. Since demand for fresh fish has been constantly outstripping supply, fish canning has not been attempted. The success of the Government's venture has stimulated the flow of private capital into the fishing industry. At least two large companies have been formed to exploit deep-sea fishing in the Arabian Sea with modern appliances and methods.

Although it was known that oil of high potency could be extracted from sharks inhabiting coastal waters, production of shark liver oil on a commercial scale was not attempted until the war, when supplies of cod liver oil from Norway were cut off. The Bombay Fisheries Department devised a simple process for the extraction of the oil which could be used with ease by the uneducated fishermen. Considerable progress has been made in the past few years. Refining of the oil is done in Bombay under the supervision of the Fisheries Department. Current output is reported to be 4,800 gallons with an average potency of 15,000 international units per gram. Plans are under way for stepping up production and development of the export trade. Similar facilities for the manufacture of shark liver oil also exist in Baroda State.

Japan

DECLINE IN SARDINE FISHERY: The catch of sardines in 1947 and 1948 was considerably below the prewar average for 1933-37. The catch for 1947 and 1948 was reported at 390,000 and 317,000 metric tons, respectively, as compared to the annual average of 1,442,000 metric tons for 1933-37. This period includes the years of peak production in the Japanese sardine fishery, according to the February 19 Weekly Summary of the Natural Resources Section of SCAP.

The area from Aomori to Chiba prefectures for 1933-37 accounted for about 40 percent of the total sardine production for Japan, compared to 27 percent in 1947 and 9 percent in 1948.

Sardine fishermen are facing financial difficulties at present, as are many other fishermen in Japan. The exact amount of financial help needed for sardine fishermen has not been determined, but it is expected to be a considerable part of the ¥142,000,000 (approximately $525,925) recently authorized for four types of fisheries, including the sardine fishery.

Japanese aquatic research workers have advanced various theories as to the cause of the decline in the sardine fishery, based principally on factors affecting water temperatures and changes in migration and availability, but the real cause or causes have not yet been determined.

Libya (Tripolitania and Cyrenaica)

FISHERIES, 1948: Tuna: The six tuna fishing and canning companies operating in Libya caught approximately 1,000 metric tons of fish in 1948, of which approximately 500 tons were canned or otherwise processed, according to a March 8 report from the American Consulate at Tripoli, Tripolitania. This figure was approximately 10 percent higher than the 1939 catch and 30 percent higher than in 1947, previously the highest production year since the occupation.

Sardine: The six sardine fishing and canning companies also had a good year in 1948. Over 340 metric tons of sardines were canned, of which a large part was exported.

Sponges: The production of sponges was 32 metric tons in 1948, of which 12 tons were harvested by Greek fishermen and 20 tons by Tripolitanians. The 20 metric tons harvested by Tripolitanians was valued at approximately $270,000; Greek sponge fishermen pay the Administration certain fees but land and sell their catch in Greece.

Figures furnished by the Administration evaluate the prewar production (1935-38) at an average of about 35 metric tons annually. However, local sources state that average production for the prewar period was more in the neighborhood of 75 to 100 tons taken by both Greeks and Tripolitanians. Practically none of the sponges harvested in Tripolitanian waters remain in the country.

Norway

EXPANSION OF TRAWLER FLEET: A special Norwegian Government committee on nationalization of the fisheries proposes legislation to permit the construction and operation of a modern trawling fleet, according to a February 21 report from the American Embassy at Oslo. In contrast to neighboring countries, Norway now has only eight trawlers. However, the proposed legislation would not sanction trawling in Norwegian waters.

Republic of Panama

DECREE CONCERNING BAIT FISHING WITHIN PANAMANIAN WATERS: The Government of Panama, by Decree No. 6 of January 13, 1949, amends previous Decrees on bait fishing, namely, Decree No. 408 of April 27, 1946, and Decree No. 564 of August 3, 1948, according to a January 17 report from the American Embassy at Panama, R. P.

DECREE NUMBER 6

(of January 13, 1949)

by which Decrees, Numbers 408 of April 27, 1946, and 564 of August 3, 1948, are amended.

The President of the Republic

in the exercise of his legal powers, and in compliance with the authority granted him by Article 244 of the Fiscal Code, and with the approval of the Cabinet Council,

D E C R E E S:

Article 1. Article 2 of Decree No. 408 of April 27, 1946, is amended to read as follows: The owners or captains of vessels fishing for bait (sardines) must apply and obtain a license at the Ministry of Agriculture, Commerce and Industries, and a Navigation License at the Ministry of Treasury and Finance.

Article 2. Fishing by the method known as "Purse-Seine" or any other method prejudicial to fisheries in general, is prohibited.

Article 3. The Sole Article of Decree No. 564 of August 3, 1948, is amended to read as follows: Fishing for bait (sardines) is permitted only in the waters to the South of eight degrees thirty minutes (8° 30') North Latitude.

Article 4. Article 7 of Decree No. 408 of April 27, 1946, is hereby canceled.

Article 5. This Decree becomes effective on the day of its approval.

BE IT COMMUNICATED AND PUBLISHED,

Given in the city of Panama, on the thirteenth day of the month of January of one thousand nine hundred and forty-nine (1949)

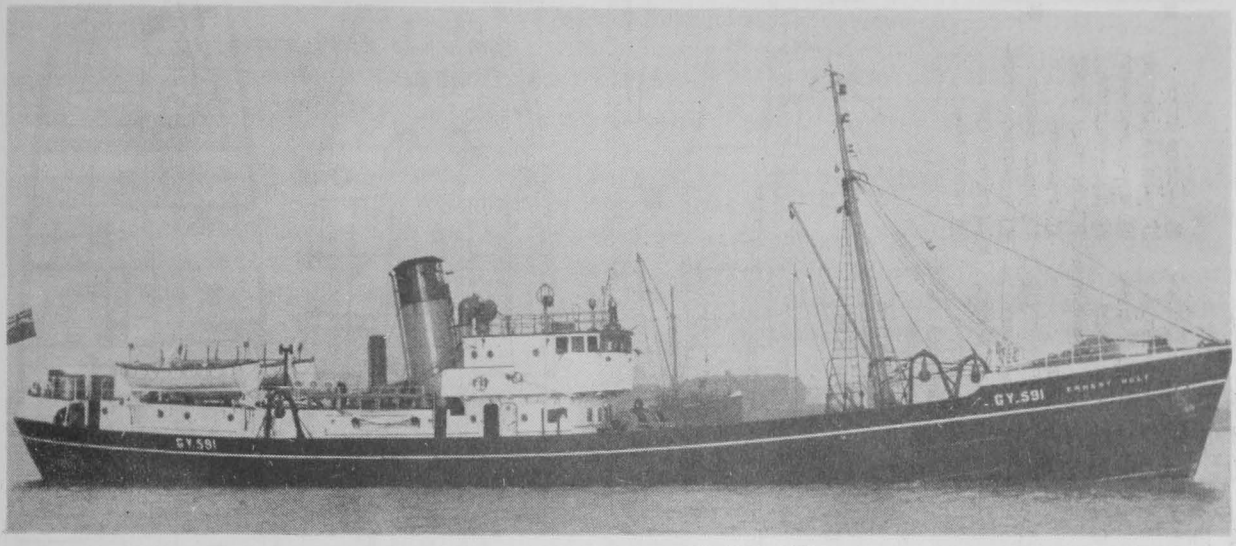
(Signed) DOMINGO DIAZ A.,

The Minister of Agriculture, Commerce and Industries

(Signed) GMO. MENDEZ P.

United Kingdom

NEW ARCTIC RESEARCH VESSEL: The British fisheries research vessel, the Ernest Holt, of Grimsby, sailed on her maiden voyage to the White Sea grounds early this year with a complement of 32 men, according to a news release received from England by the British Commonwealth Scientific Office. The new ship's program of investigation includes the use of echo-sounders in fishing operations, investigation of the factors which govern the movement of cod, relationship of temperature to fish population, taking a census of fish in the Arctic, and the research in the connection between the supply of fish foods and the fishery.



GENERAL VIEW OF THE ERNEST HOLT

The British Ministry of Agriculture and Fisheries intends to carry out fishery research in the Arctic. There is fishing at all seasons of the year, and many of the fishing grounds lie far within the Arctic Circle. Although these areas, such as the Barents Sea, are made workable by the Atlantic water that extends so far north, they are for half the year nearly completely dark, and their northern border is the Polar icefield. Some of the best fishing areas lie in the North Atlantic storm track.

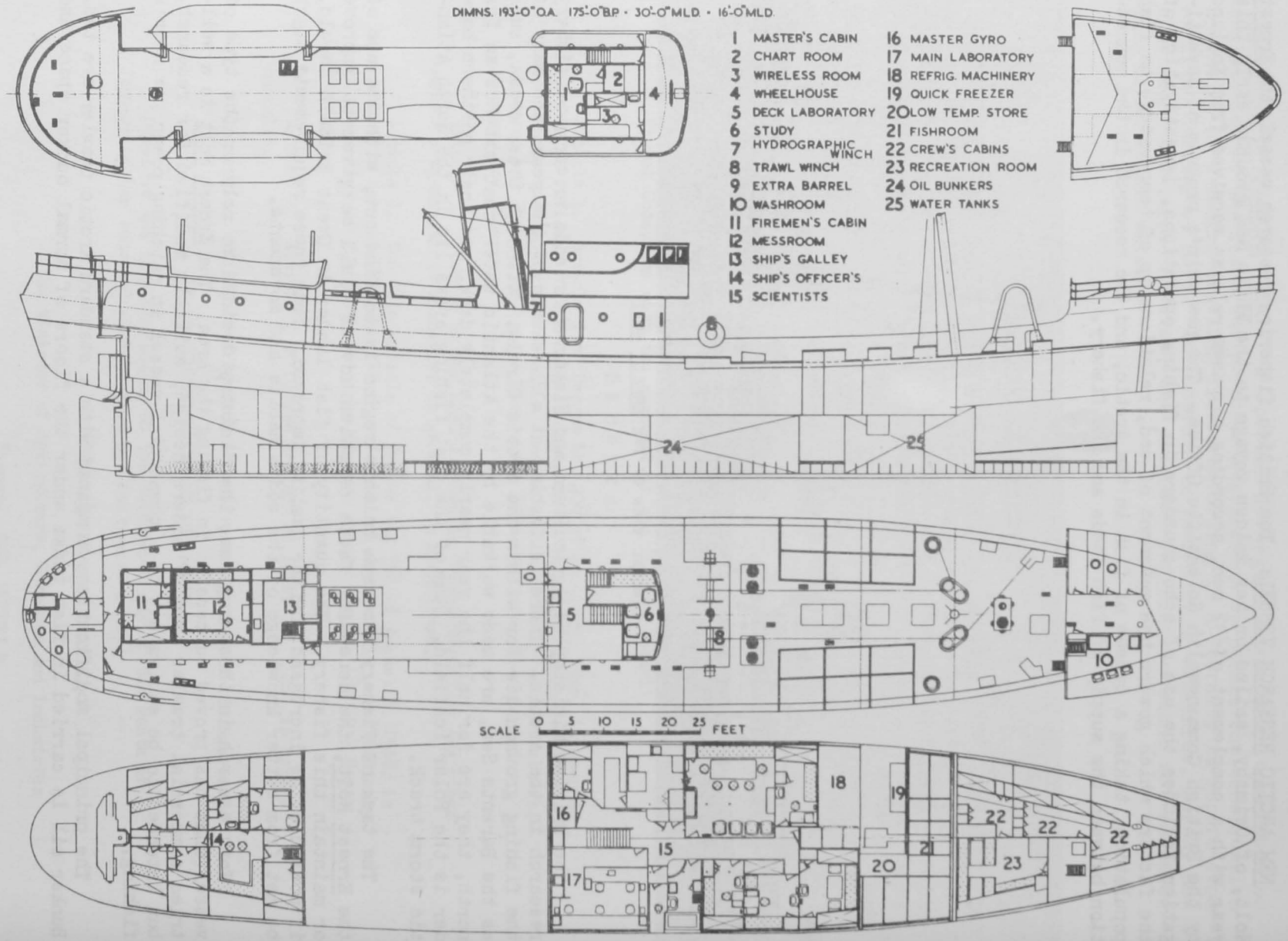
The task of Fishery Research in this region is to find out, with the use of the Ernest Holt, the necessary facts on which advice could be given to improve or maintain this fishery. The quantity of fish landed in Great Britain should, if possible, be increased, and the quality improved. Both these requirements might be met from better knowledge of the cod's habits and movements.

For research in these regions, the Ministry decided to rely on the type of vessel that has proved successful in fishing the area. The Ernest Holt is a well-tried commercial trawler type of modern design, suitably modified for research, but intended to be equivalent to a commercial vessel in catching power per hour's fishing.

The principal modifications compared with a standard Arctic trawler are two. Bunker oil is carried in flat tanks under the floors of normal bunker space and

ARCTIC RESEARCH VESSEL "ERNEST HOLT"

DIMNS. 193'-0" O.A. 175'-0" B.P. · 30'-0" MLD. · 16'-0" MLD.



"fishroom" space, to provide a main laboratory below decks for oceanographical and for biological work and to provide accommodations. The space occupied by the skipper's berth has been increased to allow a small deck laboratory and shelter for silk nets against freezing, for a small lounge, and for access to the quarters below, the Master being accommodated on the enlarged bridge above. The scientific winches are two, namely, extra drums on the main fishing winch for the heavier gear, and a light winch in a sheltered position on the casing abaft the bridge for lighter apparatus.

There has been a certain amount of strengthening for ice in the form of thickened plates at bow and stern and along the waterline. Apart from this and other minor changes, the construction conforms to standard trawler practice.

Dimensions of Ernest Holt	
Length over-all	193'0"
Length between perpendiculars ...	175'0"
Beam moulded	30'0"
Depth moulded	16'0"

In general appearance, she differs only a little from a commercial trawler. The amidships deckhouse and bridge superstructure are approximately 3' 6" longer fore and aft than in the normal trawler so as to provide space for a deck laboratory and biologist's study on the main deck. Above are the Master's cabin, the wireless room and small chartroom, all of which are abaft the wheelhouse. There is no mizzen mast, though this is absent too in several trawlers recently completed.

The main engines and boiler are of the triple expansion type developing 900 i. hp. Saturated steam is used as the running of the vessel involves many halts for scientific observations, but wherever possible, provision has been made

A CORNER OF MAIN LABORATORY ABOARD THE ERNEST HOLT

for a change to superheated steam should it be ultimately found desirable. The propeller is of "Scimitar" type.

Because of the space taken up by the laboratory and scientists' accommodation, the "fishroom" and experimental machinery space has been reduced to a total capacity of approximately 1,500 cubic feet.

This part of the ship is divided into three sections, (a) the insulated "fishroom" which has chilling grids on a brine circulation calculated to maintain a terperature of 0° C., (b) a pilot scale air-blast/contact quick-freezing plant of 5 cwt. total capacity and a low temperature store working at -10° C., (c) the machinery space which contains all compressors, circulators, etc., grouped for ease of maintenance and supervision.

The deck laboratory, which opens onto the deck abaft the winch, is used for the reception of all samples collected by a variety of nets and gear. It is an "L" shaped space, with a teak topped bench occupying the after bulkhead. A flap top is fitted at either end of the bench, in order to allow access to and from the storm passage. It is fully equipped for fishery research work.

* * * * *

PLAN FOR REORGANIZATION AND DEVELOPMENT OF FISHING INDUSTRY: The Fisheries Group of Great Britain's Parliamentary Labour Party urges that "the Government pursue a policy calculated ultimately to bring the deep-sea section of the industry to a position where it will be ripe for being wholly taken over by the State and organized as a food-producing social service," according to the March 5 British periodical, Fish Trades Gazette.

The main provisions of the plan the group advocates calls for "systematic planning" of processing, canning, marketing, and distribution; State ownership of deep-water trawlers; guaranteed prices at all stages; complete elimination of inland wholesaler and the small wholesaler at the ports; and sixteen of the larger fishing ports to be Government selling places for disposal of all fish in all forms of processing.

For the inshore fishermen, cooperatives for fishermen are recommended who "might be encouraged to engage in retailing fish under special licenses issued for the exclusive sale of inshore fish."

* * * * *

RESTRICTIONS ON U. S. AND CANADIAN CANNED FISH CONTINUED: The British Ministry of Food has been concerned about the complete absence of, or the great reduction in, supplies of canned fish, according to a December 10 report from the American Embassy at London.

Canned tunny from Turkey will soon be another British substitute canned fish product to replace higher-grade salmon, pilchards, and sardines. The Ministry has made the first, and quite appreciable, purchase of canned tunny to be packed in Turkey. It is expected to be six months before the product is on sale in British grocery stores.

Contrary to many expectations, canned snoek has proved acceptable to the British public, which bought all of it. The Ministry has sent a representative to South Africa to negotiate for the purchase, not only of snoek, but of many

other foods. A total of 225,000 cases of snoek, each containing 48 ½-pound cans, had been purchased up to December 10, and grocers were asking for more, according to the Ministry.

An appreciable quantity of sardines from Yugoslavia to supplement Portuguese and American sardines have been purchased by the Ministry.

The Ministry stated that there appeared to be little hope of obtaining American or Canadian dollars. The United Kingdom is having difficulty in paying for absolutely essential foodstuffs, such as wheat, bacon, and some eggs, and canned fish could not be said to rank with those priorities.

International

WORLD PRODUCTION OF MARINE OILS, 1948: Production of marine oils has increased slightly, due primarily to an increase in the whale oil output of 1948, according to the February 21 issue of Foreign Crops and Markets issued by the Office of Foreign Agricultural Relations, U. S. Department of Agriculture. The number of whales taken is still limited by international agreement, and except for the catch by a limited number of land stations, production of whale oil during the next few years is unlikely to exceed that of 1948 or 1949. The fishing industry has not yet recovered to the point where fish oil production is equal to prewar.

Table 1 - Marine Oils: Estimated World Production, 1948 with Comparisons

Commodity	Total in oil or fat equivalent			
	Average 1935-39	1946	1947	1948
	1,000 short tons			
Whale oil.....	585	159	377	397
Fish oil.....	315	160	212	209
Total marine oils	900	319	589	606

Table 2 - Marine Oils: World Exports, 1949 with Comparisons

Commodity	Total in oil or fat equivalent			
	Average 1935-39	1947	Estimate 1948	Forecast 1949
	1,000 short tons			
Whale oil	584	283	323	440
Fish oil	150	67	92	90
Total marine oils	734	350	415	530