FOREIGN FISHERY TRADE

Imports and Exports

GROUNDFISH IMPORTS: Imports of fresh and frozen groundfish within quota limitations, under the reduced tariff, provided under trade agreements totaled 1,560,496 pounds during January, according to a preliminary report from the Bureau of Customs, Treasury Department.

Commodity	January 1947	December 1946	January 1946	1946
Fish, fresh or frozen fillets, steaks, etc., of cod, haddock, hake, cusk, pollock, and rosefish	1,560,496	1,458,080	3,514,821	49,171,089



Australia

PEARL SHELL, BECHE-DE-MER AND TROCHUS INDUSTRY OF NORTHERN AUSTRALIA: Economic Report No. 1. This report, a publication of the Commonwealth Fisheries Office, Department of Commerce and Agriculture, Commonwealth of Australia, was prepared for the Northern Australia Development Committee. Published in 1946, it discusses the pearl fishery in detail from its beginning, in this area, in 1864.



Canada

CANADIAN PRODUCTION UP IN 1946: The total fisheries production in Canada, which increased 30 percent in value from 1944 to 1945, rose slightly further in 1946 although complete returns would not be available for another six months at least, according to a report from the U. S. Embassy in Ottawa, Canada. The total marketed value of both fresh water and sea fish caught rose from \$89.4 million in 1944 to estimated totals of \$113 and \$115 million in 1945 and 1946, respectively. The landings of sea fish during January 1947 aggregated 89.1 million pounds worth \$1.88 million, compared with 55.1 million pounds worth \$1.39 million during January 1945. The fishermen operating out of British Columbia doubled last year's catch to a monthly total of 79.32 million pounds while the strike of deep-sea fishermen in Nova Scotia led to a decline of 48 percent over last year's January figure with a total of only 4.94 million pounds, almost equaled by the 4.22 million pounds brought in the same month by the non-striking deep-sea fishermen of New Brunswick.

* * * *

COLD STORAGE: Canadian holdings of fishery products totaled 31,894,000 pounds on February 1, according to a report received from the Department of Trade and Commerce, Dominion Bureau of Statistics. Compared with stocks held on January 1, this was a decline of 6,681,000 pounds, but was 12,133,000 pounds greater than February 1, 1946.



Germany

IMPORTANCE OF DEEP-SEA FISHING TO GERMAN FOOD PROGRAM: When German fishing companies resumed deep-sea fishing in July 1945, their fishing fleet consisted of but 29 vessels. A year later, the fishing fleet numbered 131 vessels and now consists of 143 vessels; however, these constitute but one-third of the number of prewar vessels, according to the American Consulate at Bremen, Germany. Catches, which totaled but 950 metric tons during the first month, gradually increased to a monthly average of 14,600 tons in 1946, as is indicated in the following table:

Monthly Catches of Deep-sea Fishing Vessels During 1946 Landings at ports of Wesermuende, Cuxhaven and Hamburg:

	Tons		Tons
January	4,800	July	11,300
February	5,300	August	33,000
March	12,200	September	33,600
April	10,600	October	30,100
May	11,900	November	11,400
June	12,200	December	9,500

The relatively high monthly average is due to unusually good catches during the herring season, particularly during the period from August to October, when 50 percent of total catches of 1946 were landed. These abundant herring catches, however, increased total catches to but 175,000 tons, as compared with 565,000 tons in 1938.

Fish Supply Threatened: Catches in 1946 were sufficient to provide for an annual consumption of 11 pounds per capita of the population of 37 millions in the British and American Zones of Occupation. Inasmuch as practically the same quantity of fish, namely 172,000 tons, has been imported, the planned allocation of 27.5 pounds per capita was almost reached.

Sources and catches of the German fish supplies are shown in the following table:

		Catches				
		g trips	In 100	Comments of the Party of the Pa		on Rmks
	1938	1946	1938	1946	1938	1946
Fishing Vessels total	6,500	2,188	555.3	166.3	67.1	54.3 39.0
" to North Sea	3,206	1,802	224.5	115.1	23.9	39.0
" Iceland	1,576	246	141.7	29.3	20.2	9.7
" Bear Island	360	136	42.9	21.4	4.7	5.4
" Barents Sea	557	-	55.6	-		-
" Lofoten Islands	175	-	21.6	-	2.4	-
" Norwegian Coast	619	-	68.7	-	7.9	0.1
" Uther districts	7	4	0.4	0.4	-	-
Deep-sea cutters	2,891	2,496	5.6	8.2	2.2	6.3
Coastal cutters	16,078	4,151	3.9	1.8	0.7	1.1
Totals	25,469	8,835	564.9 10.9 77.6	176.2 3.1 172.0	69.9 4.1 13.4	61.6 1.5 86.5
Totals including herring	-	-	653.4 236.6	351.3 215.3	87.4	149.6

German economists recommend an increase in the supply of fish, at least for such period until supplies of meat or any kind of high quality of albumin are available again. An increase in the supply of fish, however, can only be accomplished by increasing the catches of German vessels. Last year's catches were entirely insufficient to fill requirements, they even decreased considerably during the winter months, thus threatening the supply of the large cities. Curtailment in the fish supply would practically mean a cut in the daily food ration, as fish is included in the daily allocation of 1550 calories.



Iceland

ICELANDIC MINIMUM FISH PRICE GUARANTEE LAW: Copies of the original texts and English translations of the Icelandic Minimum Fish Price Guarantee Law of December 22, 1946, and the Schedule of Minimum Fresh Fish Prices that was issued by the Ministry for Labor on December 30, 1946, have been made available by the American Legation at Reykjavik, Iceland.

The Legation reports that according to various members of the Althing, the law is a temporary measure intended to encourage the fisheries to continue maximum production by assuring profitable returns to the cod and other white fish industries at their present inflated wage and cost levels irregardless of fluctuations or decreases in export marketing prices that may appear in 1947. It grants a general increase of 30 percent in prices to the fish producers and guarantees that increase by authorizing the Government to pay the producers the difference between the guaranteed minimum prices and possible lower export sales prices. This guarantee is not granted to the herring industry as its prosperity in 1947 seems to be assured.

It is generally believed that export prices for 1947 herring and herring products will be more than 30 percent higher than they were in 1946. This is believed



most likely in the case of herring oil which has been increasing greatly in price due to the continued world shortage of edible fats and oils. As will be noted among the provisions of the law, any returns accruing to the herring industry in 1947 above the level of 30 percent over 1946 prices is to be placed in a fund for paying off possible Government ex-

penditures in connection with subsidy payments that may have to be made to the cod and other white fish industries.

That this law does not help to alleviate the inflation is recognized. It will be noted that its final provision calls for the appointing of a committee to recommend ways and means of preventing further inflation. Although the law stipulates that this committee shall make its recommendations prior to February 1, 1947, there have been delays in deciding about the persons to sit on the committee, and it had not yet been formed in mid-February.

Translations of the Icelandic Minimum Fish Price Law of December 22, 1946, and the Schedule of Minimum Fresh Fish Prices issued by Ministry for Labor, December 30, 1946, follow:

ICELANDIC MINIMUM FISH PRICE LAW OF DECEMBER 22, 1946

- Article 1. The Government, on behalf of the Treasury, guarantees the measures provided for in Articles 2-4 for the purpose of securing for the motorboat fishing industry in the year 1947, a price of 65 auras per kilo (approximately 5 cents per pound) of fresh fish, based on cod and haddock, gutted with head.
- Article 2. The Treasury guarantees refrigeration plants the difference between the sale price of cod and haddock* and Kr. 1.33 (approximately 9 cents) per pound f.o.b., but the guarantee must not, however, exceed 35 auras (approximately 5 cents) per pound. The price of other species of fish shall be proportional.
- Article 3. The Treasury guarantees saltfish exporters the difference between the selling price and Kr. 2.23 per kilo (approximately 16 cents per pound) f.o.b., based on fully cured large cod first class, and the prices of other classes and species of fish shall be proportional. A proportional price shall be guaranteed for exported dried fish.
- Article 4. In order to guarantee a price of 65 auras (approximately 5 cents) for fresh fish, and the sale of the catch, the Government is authorized to guarantee the price of exported fish which is processed in a manner other than provided for in Articles 2 and 3.
- Article 5. The Government is authorized to issue instructions concerning the processing of fish in accordance with marketing possibilities.
- Article 6. In order to meet the expenditures which may result from the guarantees provided for in Articles 2-4, the Government shall retain and place in a special guarantee-fund that part of the 1947 sale-price of herring products which exceeds the price received for unprocessed herring in 1946 plus an increase in proportion to the increase in the price of fish provided for in Article 1 and processing (production) costs.

If there is a credit balance in this fund it shall be divided between the fish producers (entrepreneurs) and the seamen, in proportion to the herring catch of each vessel.

The Government is authorized to establish independent guarantee districts on recommendation of the Federation of Icelandic Fish Producers, and there will be a particular (separate) guarantee-fund for each district thus established.

The Guarantee-Tax on exported or sold herring products shall be paid into the guarantee-funds in proportion to the catch of the district compared with that of the whole country.

The Government shall establish more detailed regulations regarding the guarantee-districts and funds.

- Article 7. The minimum price of fresh fish based on the 65 aura (5 cents) price provided for in Article 1 shall be published prior to January 1, 1947, and the price of other species of fish shall be proportional. The Federation of Icelandic Fish Producers shall be consulted in the price fixing.
- Article 8. The Government may issue more specific regulations concerning the execution of this Act, including affidavits to the effect that share-seamen and fish producers who sell their catch to others have received the minimum price provided for in Article 7, since the reason for the Government measures and guarantees provided for by the Act is the payment of this price for fish.
- Article 9. The Government shall appoint a committee of four members, chosen by the Althing Parties, for the purpose of recommending ways and means of preventing further inflation and this committee shall report its recommendation prior to February 1, 1947.

^{*}Editors' Note: Presumably reference is to frozen fillets.

Article 10. This Act takes immediate effect.

NOTICE OF MINIMUM PRICE OF FRESH FISH

In accordance with the provisions of Article 7 of an Act of December 28, 1946, on Government Guarantee for the Motorboat Fishing Industry, etc., it is hereby determined that from and including January 1, next, the minimum price of fresh fish shall be as follows:

	Per kilo	Per 1b.
Cod, Haddock, Ling, and Dab: With head	Kr. 0.65 0.845	4.56¢ 5.94
Norway Haddock (Rosefish) and Tusk (Cusk): With head	0.27	1.89 2.53
Coalfish (Pollock): With head	0.34	2.39
Skate Wings: Large Small Halibut over 15 kgs. (33 lbs.) Catfish (Wolffish): In usable condition, with head	0.50 0.35 4.50 0.45	3.51 2.46 31.6 3.16
Flatfish other than Megrim, Witch, Dab, and Halibut over 15 kgs. (33 lbs.) Megrim and Witch Dogfish	1.80 0.85 0.20	12.65 5.97 1.41

These provisions remain effective until otherwise determined.

MINISTRY OF LABOR, December 30, 1946.

* * * * *

SEA FISHERIES OF ICELAND: The landings of groundfish and herring in Iceland during 1946 were 16 percent greater than those during 1945, according to Statistical Bulletin issued by the National Bank of Iceland and The Statistical Bureau of Iceland.

The following table gives a break-down of the landings of groundfish and herring, and the disposition of the groundfish catch for the last 2 years.

Landings	1946	1945.
Groundfish Herring Total catch	Pounds 432,940,000 289,786,000 722,726,000	Pounds 492,492,000 130,259,000 622,751,000
Iced Frozen Dried	193,472,000	343,983,000 131,531,000
Canned Salted	1,619,000 1,799,000 69,790,000	4,034,000 611,000 7,275,000
Home consumption	5,438,000	5,055,000

NOTE: All groundfish weights are for drawn fish.



India

The Department of Agriculture, Government of India, is currently endeavoring to stimulate the production and marketing of fish, both marine and inland varieties, states a recent report from the American Embassy at New Delhi, India.

The average annual net available supply of fish is estimated at 170.5 lakhs of maunds (1398.1 million pounds) of which 107.9 lakhs (884.78 million pounds) are sea fish and 62.6 lakhs (513.32 million pounds) are fresh water fish.

An examination of the data relating to the production of sea fish leads to the conclusion that marine fishing has made very little progress in India in recent years.

It is reported that the annual catch of fresh water fisheries is progressively declining. The population of India, on the other hand, increased by 15 percent during the decade ending in 1941. The conclusion is inescapable, therefore, that the per capita consumption of fish has declined appreciably in recent years.

In view of the scarcity of food in India, and the relatively undeveloped state of its fishing industry, it is likely that for many years to come India will be able to use all the fish the industry can catch.

The present situation of the fishing industry can probably be best described by the following quotations from a recent publication--"Report on the Marketing of Fish in India"--by the Agricultural Marketing Adviser:

"At present the maritime and riverine fisheries of India occupy but a minor place in the economic organization of the country. Fishery experts in India agree that 'tanks,' ponds, and rivers are capable of maintaining large populations of edible fish and that it is merely a question of development and adequate scientific control in order that pisciculture may become an important source of food. Evidence is not wanting that a substantial percentage of the catches landed at present are allowed to go waste. Scattered fishing centers, primitive methods of capture, preservation and transport, and the inadequacy of marketing facilities are responsible for this state of affairs. In India, the occupation of fishing and of dealing in fish is looked upon as a mean one, to be carried on exclusively by the lower classes. There are very few instances of men with education and capital entering the fishing industry. The result is that the fishing industry in India is essentially a cottage industry financed by a large number of petty owners and traders and worked mostly by the illiterate (but not unintelligent) section of the population. 'Fisheries' has been a provincial subject since the Reform days and, so far, local Governments in India have insisted upon the Fisheries Departments paying their own way

"Fish are caught from every piece of water in this country. The chief sources of supply are the coastal margines of the sea, river, estuaries, and back-waters for marine and estuarine fish, and rivers, irrigation and other canals, lakes, tanks, inundated tracts, jhils (small country lakes), etc., for fresh water fish.

"India has a coast line of 3,220 miles. The total area of the sea which lies between the coast and 100 fathoms line is approximately

115,000 square miles. Only a small portion of this area is worked; there is practically no deep sea fishing, the boats are generally of the catamaran or cance type and night fishing is not general."

The Central government has no authoritative jurisdiction over this subject.

In a speech broadcast over the All-India Radio (New Delhi) on January 13, 1947, Dr. Baini Prashad, Fisheries Adviser to the Government of India, said, in part:

"...The steps that are at present being taken by the Government of India in respect of the Marine Fisheries consist in providing increased facilities for fishermen in Bombay, Bengal, and Sind and Travancore State to obtain timber, yarn, sail-cloth, coaltar, fishhooks, ice for preservation, and finally motors and engines to be fitted on the fishing boats to enable them to transport fish as quickly as possible from the distant fishing grounds to the consuming centers. The fishing trade is being given facilities for importing fishing craft and gear, ice and cold storage plants, so that fish caught can be properly preserved in ice and transported rapidly from the fishing to the consuming centers. It is hoped that the Indian railways will also provide regular refrigerated vans on their fast services for the carriage of fish to the inland markets.

"Finally the Government of India are about to start a Scheme of Pilot. Fishing to find out the most suitable craft and gear for use in Indian waters. Four different types of modern fishing vessels together with equipment have already been ordered from the U.S.A. and U.K.

"The question of starting scientific investigations in order to put the fisheries of India on a sound foundation, has, therefore, been actively taken up by the Government of India. While a Central Fisheries Institute is to be established in due course, fishery surveys and investigations on selected subjects will soon be started at the existing fishing and research centers."

There are practically no imports of raw fish into India.

Imports of dried fish (salted and unsalted), wet-salted and canned fish, fish products such as cod-liver oil and fish waste averaged 140,376 cwts. (15,722,112 pounds) valued at Rs. 1,634,966 (\$494,700) for each year during the 12 years ending with 1941-42.

Canned fish consumed in India are wholly imported. The United States furnished 20.6 percent, or an annual average of 528.8 tons, of the imports during the 12-year period ending in 1940-41. Nearly 60 percent of the imports came from the Empire countries, Canada and the United Kingdom sharing almost equally in this trade.

It is considered doubtful, according to the Report, if any Indian canning industry could compete with a reasonable chance of success in this specialized market. Europeans and Anglo-Indians, who form the bulk of the consumers of canned fish, prefer salmon and herring to any of the Indian varieties.

Canned fish, it is stated, cannot be adapted to the Indian method of cooking as the average Indian prefers to cook his own food in his house rather than take something ready made and touched by "undesirable" hands.

Certain of the maritime provinces and States have built up an export trade in preserved fish to Ceylon, Burma, and countries in the Far East. Exports of

preserved fish averaged 353,238 cwts. (39,662,656 pounds) valued at Rs. 7,824,725 (\$2,367,900) per year for the 9 years' period ending with 1940-41. During the same period the exports of fish waste averaged 95,651 cwts. (10.612.912 pounds) valued at

Rs. 406,294 (\$122,950) per year. Exports of fish waste have been steadily increas-

ing since 1933-34.

The consumption of fish both fresh and preserved, is limited not only by low production but also by the almost total lack of refrigeration either at the ports or for transport or at markets, extremely crude and poor curing methods, religion, caste, customs, prejudice, and last but not least -- by cost.



In the interior of the country fresh fish (including sea fish) is a luxury even for the middle class people and sun-dried or cured fish are not very popular with the majority of consumers. Both fresh water and sea fish have to compete with meat and are much more expensive.

As with many other foods, the readiness with which fish is consumed, depends upon customs, religion, and prejudice. To a westerner, the fact that hungry or starving Indians, or Indians living on a totally inadequate or unbalanced diet, will refuse certain foods because of customs, or prejudice, or religion -- is baffling and exasperating. Caste plays an important part in the diet. Brahmins (except the Kashmiri pundits and residents of Bengal and certain portions of Bihar), certain sections of caste Hindus (from 15 to 35 percent), Jains and Budhists totally reject fish as food. Hindu widows in Bengal are prohibited by custom from eating fish. Another peculiarity of Indian consumers is said to be that those accustomed to eating fresh water fish have no liking for sea fish, and similarly those accustomed to sea fish seldom eat fresh water fish.

It is extremely problematical whether the advice and suggestions of the Indian Department of Agriculture for furthering the production of both sea and fresh water fish, will have any substantial effect in the face of current customs, prejudices, and religious scruples against eating any animal foods, lack of refrigeration and refrigerated transport, and the comparatively higher cost of fish foods.



U. S. COMMERCIAL COMPANY IN KOREA: A contract was signed with the United States Commercial Company to control and supervise the sale of Korean products in the United States on a government-to-government basis, according to General MacArthur's December summation of Military Government activities there. The company will not have an exclusive contract, but its facilities for disposing of certain products, such as minerals and metals, will supplement private trade. Included in the first Korean cargo, which left December 25 for the United States, was 67,950 pounds of fish liver oil and 16,961 pounds of fish creels.



Mexico

SHRIMP PRODUCTION: Shrimp fishing at Guaymas, Sonora, reached its peak during the month of March, according to the American Consulate at Guaymas, Sonora, Mexico, with most of the fleet operating in the waters near the mouth of the Colorado River. Prices maintained good levels and volume shipments of both fresh and frozen shrimp were exported to the United States, principally to West Coast points. An extension of the season beyond April 15 was requested by the industry, but no action by the Mexican Government had been reported in this regard. It was generally believed, however, that an extension would be granted until May 31.



Netherlands

THE FISH PRESERVING INDUSTRY: The fish preserving industry in the Netherlands is being forced to look to the export field as the demand on the domestic market is being satiated, according to the American Consulate General in Amsterdam. Dur-



ing the war, the industry expanded because competition from foreign sources was restricted and the domestic demand was high.

The value of the output of the fish preserving industry was \$190,000 in 1938 and \$1,819,440 in 1943. Production decreased considerably after September 1944, but soon after the end of the war the prewar production level was again reached or even surpassed. At present the production capacity is too large for the domestic market.

Exports in 1938 were 1,196,934 pounds valued at \$84,521. During the war no exports were made, but increased production

was absorbed on the domestic market. It is estimated that the value of exports in 1946 may be as high as \$380,000. The industry is now able to export such items as herring in oil, herring in tomato sauce, fried herring, various mackerel products, smoked and stewed eel, chopped fish and fish paste. In 1945, an Inspection Commission was established to prevent the export of poor quality preserved fish.

The fish preserving industry came into being a few years before the war, and there are now 43 plants, of which 15 are mussel packing and processing factories. Thirty-six of the plants are located in the western part of the Netherlands near the seacoast. Ijmuiden, Utrecht, Amsterdam and vicinity, and Zaandijk are among the centers of the industry. Some of the plants handle only fish, while others are connected with the vegetable and meat processing industries.



Newfoundland

NEWFOUNDLAND'S FISHERIES: At the 38th Annual Meeting of the Newfoundland Board of Trade, Mr. J. T. Cheeseman, formerly a member of the Newfoundland Fish-

eries Board, spoke on the future of the fisheries in Newfoundland. His remarks are reproduced, in part, as follows:

"In my opinion there is nothing to indicate that there is likely to be any serious recession, particularly in the price of salt codfish, during the current season but clouds are beginning to appear on the horizon and the situation indicates that caution



should now be exercised in all branches of the fish industry.

"Some of the darker clouds that I refer to overshadow the following branches, viz.

- "Salt Cod: (a) Shortage of foreign exchange and lack of political stability in Greece, Italy and Spain, which were amongst our larger customers in prewar days.
 - (b) Increasing production by the Portugese National Fleet since 1941, which increase has been more than 50 percent and the fleet of modern fishing vessels is becoming larger and larger. Portugal has for centuries been one of our largest buyers, taking practically all of our Bank fish as well as large quantities of Shore fish.
 - (c) Our chief competitors, Iceland, Norway and Canada, with their greatly improved production facilities will be giving us stiffer competition than ever.
 - (d) High costs of handling here due to lack of centralization, high priced packages, and excessive overhead costs, caused largely by antiquated handling facilities.

"Fresh and Frozen Fish: The production and export of frozen fish from this country, almost entirely cod fillets, has since 1939 increased manifoldly; for instance, total production in 1940 was approximately 7,000,000 pounds and in 1946 was 29,832,285 pounds. ... Therefore, in my opinion, the immediate outlook for our frozen fish industry is, to put it as gently as I can, uncertain and weak.

The principal weaknesses that appear to me are:--

- "A. As a result of demand, created largely by the war, production in Newfoundland and other countries increased much more rapidly than the present means of distribution, with the result that as relief agencies discontinue buying and United States housewives are buying less than in the war years when meat and other foods were scarce, stocks are piling up in the cold storages in both producing and consuming countries.
- "B. The principal foreign producing countries look almost entirely to the United States to buy their ever increasing quantities of fish at high prices.
- "C. Insufficient distributing facilities, insufficient advertising.

- "D. Retail prices are, in comparison with many other well advertised foods, too high.
- "E. Insofar as our local situation is concerned, it is subject to all the external weaknesses that I have referred to, plus a number of purely local difficulties over which we have no control, and others over which we have control but stubbornly refuse to act to overcome them.

"Amongst the local handicaps beyond our control are:

- "1. We have no home market of consequence for fresh or frozen fish, consequently are wholly dependent upon export markets, a situation which does not apply in any competing country.
- "2. Remoteness from consuming markets, necessitating large storage facilities in proportion to total production, which entail high capital costs and carrying charges.
- "3. We produce almost entirely one species of fish, viz. cod fillet, whereas, United States distributors must also be able to supply retailers with other species. Therefore, in normal times when supplies are plentiful the major portion of the orders from retailers might be expected to go to distributors who can supply cars of mixed species.

"I know of at least one Newfoundland producer who finds it necessary to purchase supplies of rosefish fillets and other species in the United States in order to boost the sale of their cod fillets in that country.

- "4. We have to import and pay transportation charges on all plant equipment and packaging material.
- "5. We have the added cost of freight and insurance on our products from Newfoundland to the mainland.

"These two last mentioned items alone put us at a disadvantage of from 1 to 12 cents per pound as compared with operators on the mainland.

"And of the handicaps which we could control, I mention what seem to me to be the most obvious:

- "A. Almost entire lack of modern methods of fishing, resulting in uneconomic catches per man.
- "B. Lack of centralization, which increases cost of management and general overhead charges, makes it uneconomical to operate plants for processing the offal which amounts to approximately 60 per cent of landed weight.
- "C. The system of cutting and trimming large quantities of fish remote from freezing plants and then hauling the fillets long distances in warm weather by ordinary trucks over rough roads, which is definitely injurious to the quality.
- "D. The fact that each of the Newfoundland operators employ separate selling agencies in the United States makes the selling cost considerably more expensive than if all the selling in that country was done through one agency.

"The point that because we are near prolific fishing grounds means we necessarily produce the best fish in the world has been overstressed. Fast modern fishing boats now employed by our competitors have taken away considerable of the advantage that we once enjoyed by our proximity to fishing grounds.

"It is not strictly correct to say that there is yet an over-production but the effect is the same as though there were. The fact is that there is now being more frozen fish produced than can with present selling methods and distributing facilities be readily distributed.

"It is much more difficult to provide quickly such distributing facilities as refrigerated trucks and railway cars, regional refrigerated warehouses, refrigerated holding chambers and display cases in the potential areas of consumption than it is to provide fishing boats and nets and processing plants at the points of production. When the facilities for distributing, backed by large scale advertising, are provided, the consumption of frozen fish will be sufficient to take care of greater production, always provided that the quality is reliable and the price to the consumer comparative with other foods."



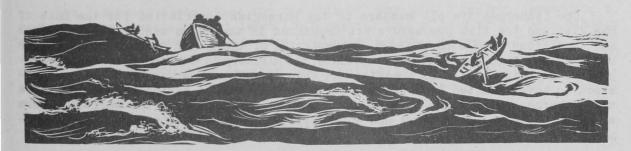
Norway

OBSERVATIONS ON NORWEGIAN FISHERIES: During a trip to northern Norway, an opportunity was presented for observations of the Norwegian fisheries, particularly at Trondheim and the Lofoten Islands, according to a report of the American Embassy at Oslo.

One of the first plants visited was at Trondheim. It has one large automatic filleting machine but most of the other processes are performed by hand labor.

The next stop after leaving Trondheim was at Bodø, north of the Arctic Circle, which was devastated by the Germans in 1940. The town of Bodø is now about one-third rebuilt. The present population, many of whom were forced to go to southern Norway after their town was destroyed but have since returned, are industrious and determined not only to rebuild their community but to make it more important as the agricultural, forestry, and fishing resources of the area adjacent to Bodø are further developed.

The first spot visited in the Lofoten Islands was Stamsund, a small fishing center located about 40 kilometers south of Svolvaer, the principal town in the Islands. There an opportunity was afforded to members of the party to transfer into small fishing boats and go out with the fishing fleet to observe the cod fishing. In this part of the fishing grounds, most of the fishing is done by hand line. A considerable proportion of the fishing boats were motor boats of from 2 to 15 or 20 tons. The smaller boats towed one or two dories, each containing a single fisherman who operated a hand line with one hook. The larger boats towed as many as four or five dories. Several fishermen also worked from the parent boats.



Fishing in the Lofotens is a traditional occupation, passed down through families for many generations. A large proportion of the fishermen are farmers from the mainland who add to their farming income by fishing, during the winter season, in the Lofotens. They are a hardy, courageous people, but are highly conservative and the evolution of fishing technique in the Lofotens has taken place very gradually. Motor boats were first used there in 1903. For some time, they encountered the same opposition as the early automobiles experienced, but today most of the fishermen operate motor boats, many of which are purchased with the financial assistance of the Government.

The fishing gear used in the Lofotens, however, is, in principle, much the same today as it has been for many years. The use of the old fashioned hand line with one or two hooks is still the general practice, but the tendency for the individual fishing boats to use a larger number of dories and a correspondingly larger crew, has resulted in larger catches. Increasing use of motor propelled capstans, both by boats using long lines and nets, has made possible the use of a greater amount of gear and increased the catch.

The Fisheries Department of the Government is conducting experiments in new types of fishing gear on the Lofoten fishing grounds. Formerly, only stationary gear was used but the Government has subsidized experiments with "active" gear suitable for pelagic fishing. Experiments are also being made with seines and drive bags.

It is not necessary in this report to describe in detail the well-known natural conditions which make the Vestfjord an immense landing net which traps the codfish as they are forced into it by storm and ocean currents. Along the so-called "Lofoten Wall," formed by mountains emerging sharply from the sea, lie the rich fishing grounds which often extend down to a depth of over 200 yards, sometimes near the Wall, sometimes as far as 12 miles off shore. Nature has formed this region in such a way as to provide a very bountiful supply of cod which could undoubtedly be more effectively exploited by the introduction of more modern fishing methods. This season there are approximately 20,000 fishermen and about 5,500 boats on the Lofoten fishing grounds. Introduction of more modern methods would result in the unemployment of a considerable number of fishermen. This fact would make the problem difficult in any country; the independence and conservatism of the Lofoten fishermen make ita particularly difficult problem for Norway. It seems evident, however, that the gradual introduction of more modern fishing methods will be only a matter of time.

Fishing is strictly controlled in the Lofotens in order to insure the quality of the fish caught. Fishare killed as soon as caught and gutted as soon as possible. Most of the gutting is done while the vessels are en route to the fishing stations. The catch is culled in the hold, the liver and roe are poured into barrels, and the offal is thrown overboard.

The fishermen are all members of the Norwegian Association for the Sale of Raw Fish and the fish processors are organized in their own association. Prices and conditions of sale are fixed at the beginning of the season through negotiations between the Government's Price Directorate, the Ministry of Fisheries, and the Fishermen's Association. This practice has ended the former abuses which are understood to have resulted from the establishment of private buying monopolies where the fishermen were continuously at the mercy of the whims of a few wealthy buyers whose position was entrenched and whose prices had to be accepted by the fishermen who had no alternative market.

Some of the cod caught in the Lofotens are processed in plants at Stamsund, Svolvaer, and other communities in the Islands. Fresh cod is exported in ice, either beheaded and gutted, or as fillets. Since the development of quick freezing methods, large quantities are also brought to plants where, like the ones at Trondheim and Bodø, the cod is processed and exported as frozen fillets. Some cod is also exported as lightly salted fillets. Most of the skrei (spawning cod) is made into split salted cod, stockfish, or air-dried cod. After sorting, the finest roe is sent at once to the canning factories. Most of the roe, however, is salted in barrels and is normally exported. The liver is sent to the fish oil factories and the cods' heads, backbones, and other offal are dried and ground in facilities centered around Svolvaer and Stamsund in the Islands.

The smallest catch recorded for the Lofoten fishing grounds was 49,000,000 pounds in 1918. The record catch during the 100 years for which statistics exist was 286,000,000 pounds in 1929. The average catch is about 176,000,000 pounds per year.

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WHALE AND HERRING OIL PRODUCTION, 1947: The American Embassy at Oslo, Norway, reports that according to a compilation of reports received from seven floating factories and one land factory, whale oil production has reached a total of 575,718 casks, or nearly 96,000 metric tons (one metric ton equals six casks). This compares with the production of the entire 1945-46 season (six floating factories and one land factory) of 518,842 casks, or 86,400 metric tons.

Norwegian authorities estimate, taking into consideration the possibilities of unfavorable weather, that production during the present season may total 850,000 casks, or 140,000 metric tons. The season will end April 7, 1947.

Prices obtained for the 1945-46 season production ranged from $67\frac{1}{2}$ to 70 pounds sterling (\$272-\$282) per metric ton and it is not expected that prices will be any lower this year. Prices received in the years 1936 to 1939 per metric ton are as follows:

Year	His	g h	Low		
1936	£23-0	\$93	£17-10	\$69-40	
1937		97	17-0	69	
1938		56-61	12-10	48-40	
1939	40-0	161	12-0	48	

It is expected that the 1946-47 production will carry a value of between $9\frac{1}{2}$ or 10 million pounds sterling, or nearly 200,000 million Norwegian kroner (\$40,000,000). The Norwegian whaling industry has never before received such a high gross income; however, it is pointed out that the prices of new ships, seamen's wages, materials, fuel, etc., are much higher than those prevailing before the war.

The Norwegian Association for the Sale of Herring Oil reports, according to preliminary estimates, that at least 10,000 metric tons of herring oil have already been produced this season. The entire production during 1946 was only about 14,000 metric tons. The 1947 production is now expected to total not less than 20,000 metric tons. The limiting factors are plant capacity and storage space. All available storage space is now filled. The catch of herring, this year, has been abnormally high:

Production of herring oil for 1938 through 1944 has been as follows:

Year	Metric tons
1938	 25,000
1939	 19,000
1940	 25,000
1943)	 7,000

Prices obtained during 1946 were 67 pounds 10 shilling (\$270) per metric ton. Apparently no sales for the 1947 production have yet been negotiated. However, it is reported that Iceland herring oil producers are asking 150 pounds sterling (\$605) per metric ton, although it appears that the Norwegian producers are not convinced that actual sales will be that high. At any rate, they are using a figure of 100 pounds sterling (\$403) per metric ton in appraising the value of the 1947 production.



Philippines

SPONCE INDUSTRY: The sponge industry in the Philippines has always been a minor one, concentrated around Jolo in the Sulu Archipelago, according to a report from the American Embassy in Manila. In 1940, there were two sponging boats operating with four divers and eight other crewmen and production amounted to 6,600 pounds. There were no exports in 1940 and most of the 1940 production was destroyed by fire during the war. Exports averaged only a few hundred pounds a year, which went entirely to the United States.

The limited sponging equipment, including boats and warehouses, was entirely destroyed during the war and it has so far not been replaced, largely because of lack of capital. There have been a number of inquiries received from abroad and the Chief of the Division of Fisheries of the Philippine Government believes that the industry could be built up to a point beyond the prewar standard if capital and equipment could be made available.

The price received before the war was approximately \$1.00 a pound for the "Elephant Ear" or flat sponge and \$1.50 a pound for selected varieties. Present prices would depend on prices quoted by purchasing countries, but would probably have to be about twice the prewar prices in order to interest producers, because of the general increase in the price level. There is no domestic demand for sponges.

Stocks on hand, according to the Chief of the Division of Fisheries, amount to 11,000 pounds. It is believed that these must be of a very inferior quality, however.

