FOREIGN FISHERY TRADE

Imports and Exports

GROUNDFISH IMPORTS: Fresh and frozen groundfish imports, under the tariff classification "fish, fresh or frozen fillets, steaks, etc., of cod, haddock, hake, cusk, pollock, and rosefish," amounted to 3,175,144 pounds in December, reaching a total of 41,313,204 pounds for the year 1945, as reported by the Bureau of Customs, Treasury Department. The year's reduced tariff quota was 17,668,311 pounds, and all imports exceeding this figure have been subject to the full tariff rate of $2\frac{1}{2}$ cents per pound.

Commodity	Dec. 1-29, 1945	Nov.4-30,1945	Dec. 1944	Jan Dec. 1945	JanDec. 1944
Fish, fresh or frozen, fillets, steaks, etc., of cod, haddock, hake, cusk, pollock, and rosefish	3,175,144	2,724,035	1,634,616	41,313,204	23,683,431



Canada

VITAMIN OIL, BRITISH COLUMBIA: Production of vitamin oil in British Columbia during 1944 amounted to 5,000,000 pounds, having a value of more than \$4,500,000, according to a report received by the State Department from the American Consulate General at Vancouver, British Columbia, Canada.

An abstract of the report follows:

Thirteen years ago, the livers handled in British Columbia for their vitamin oil content were halibut, lingcod, black cod, and red cod. While these four species are still being caught in much larger quantities than a decade ago, discoveries made by science in regard to the vitamin content of fish livers have greatly widened the field, and now dogfish, gray cod, soupfin sharks, mud sharks, skates, and salmon are being landed in large volume for their vitamin content as well as their food value.

Dogfish landings in British Columbia during 1944, valued at \$3,751,460, were only exceeded in point of value that year by salmon and herring. Dogfish livers have an oil content of from 65 to 75 percent and a vitamin A potency of from 3,000 to 30,000 units per gram.

The annual catch of halibut by fishermen of British Columbia is approximately 12,000,000 pounds. In 1944, Canadian landings of Pacific halibut amounted to 13,167,100 pounds, valued at \$2,231,794. The quantity of halibut livers taken that year was 217,700 pounds, valued at \$143,057. Production of vitamin oil from livers was 27,207 pounds, valued at \$146,915, and the production of vitamin oil from viscera amounted to 22,781 pounds, valued at \$86,197.

Production of vitamin oil from livers of black cod in 1944 amounted to 7,891 pounds, valued at \$57,776, and production of vitamin oils from the fish viscera totaled 4,099 pounds, valued at \$18,920.

The total catch of salmon in British Columbia during 1944 was 107,571,900 pounds, valued at \$15,623,223. Although the greater part of the salmon catch is used by the canning plants, some salmon livers are used for making vitamin oil. In 1944, 1,264 pounds of vitamin oil, valued at \$566, were produced.

In 1944, production of soupfin shark liver vitamin oil amounted to 34,690 pounds, valued at \$288,436, and production of mud shark liver vitamin oil was 80,828 pounds, valued at \$28,650. In addition, there was a small production of mixed shark liver vitamin oil amounting to 9,683 pounds, valued at \$5,982.

The catch of lingcod in the waters off British Columbia is quite a substantial one, amounting to 8,425,000 pounds in 1944, from which 20,025 pounds of vitamin liver oil, worth \$310,295, and 11,462 pounds of vitamin viscera oil, valued at \$8,283, were produced.

Vitamin Aoils having a potency range up to 40,000 U.S.P. units are considered low potency oils in Canada and those vitamin A oils having a potency above 40,000 U.S.P. are considered high potency oils.

While it would appear that the production of vitamin oils from dogfish livers should show a substantial decrease as a result of over-fishing during the war years, it is anticipated that Government control of high potency vitamin oils will be removed, enabling American buyers to procure a portion of their requirements in this market.

A recapitulation of production figures is given below, showing the production of vitamin oils in British Columbia during 1944:

	Pounds	Value
Cod liver oil	3,794	786
Halibut liver oil	27,207	146,915
Halibut visceral oil	22,781	85,197
Salmon oil	1,264	566
Black cod liver oil	7,891	57,776
Black cod visceral oil		18,920
Lingcod cod liver oil	20,025	310,295
Lingcod visceral oil	11,462	8,283
Red and Rock cod liver oil	2,566	27,166
Red and Rock cod visceral oil	412	268
Grayfish liver oil	4,909,808	3,661,121
Soupfin shark liver oil	34,690	288,436
Mad Shark liver oil	80.828	28,650
Mixed shark liver oil	9,683	5,982
Total		4,641,371

COLD STORAGE: Freezings of fishery products in Canada's freezers in December totaled 5,590,000 pounds, according to reports of the Department of Trade and Commerce of the Dominion Bureau of Statistics. On January 1, there were 28,148,000 pounds of fishery products held in cold storage. The holdings on January 1 were almost identical to those of a year previous, and were about 5 million pounds under those of December 1, 1945.



Mexico

FISHERIES IN 1945: The most striking development in the Mexican fisheries during 1945, according to M. J. Lindner, Fish and Wildlife Service representative, was the decline in the production of shark livers due to a scarcity of sharks. Shark livers are utilized primarily for the extraction of vitamin A. From a high of approximately 20 trillion units of vitamin A production in 1942, the Mexican livers dropped to about 9 trillion units during 1945. This decrease in production resulted in the withdrawing, by a majority of the United States concerns. of

their local purchasing representatives. Many of the Mexican fishermen now are no longer finding it profitable to fish for sharks, and unless there is a sudden unforeseen increase in the shark population, the 1946 catch will be lower than that of 1945.

Since 1942, regardless of a steadily increasing fishing intensity, the production of shark livers has continued to decline due to an apparent decrease in the abundance of the sharks. The return to the individual shark fisherman has reached such a low level that many are now turning their efforts to other fishes. This decrease in sharks has probably been caused by over-fishing.

Guaymas, Sonora, is rapidly outstripping all other Mexican ports as the most important fishing town in Mexico. Guaymas now has three quick-freezing plants, two of which were completed during 1945; one fish-liver extraction plant; one cannery, which was remodeled in 1945; and a shark-hide tannery that is under construction. The most important fishery product of this port is frozen headless shrimp, followed by such items as totuava or white sea bass, shark livers, cabrilla, oysters, and Spanish mackerel. With the exception of the oysters and Spanish mackerel canned for domestic consumption, practically the entire production is exported to the United States.

In addition to the freezing plants mentioned at Guaymas, there is one at Topolobampo, Sinaloa, another under construction near Guaymuchil, Sinaloa, and a small one in construction at Mazatlan, Sinaloa. These plants are primarily dedicated to shrimp, but undoubtedly will process other fishery products as well.

A modern fish-liver, vitamin-extraction plant is nearing completion in Guadalajara, Jalisco.

The shrimp fleet in the Gulf of California has continued to increase, and there are now over 100 trawl boats operating between Guaymas, Sonora and Altata, Sinaloa.

The exportation of fresh fish to the United States through Laredo and Browns-ville, Texas, amounted to over four million and a half pounds during 1945. In spite of the easing of meat rationing in the United States, the shipments during the period September 1 to December 31, 1945, showed an increase of over 25 percent above that for the corresponding period in 1944. These shipments normally are lowest during the winter holiday season and highest during Lent.



Norway

TRAWL FISHING: The State Department has received information from the United States Embassy at Oslo, Norway, to the effect that the trawl fishing law in Norway, which became effective March 17, 1939, is being contested.

Outstanding provisions of the law are set forth as follows:

- 1. It is forbidden to carry on trawl fishing in Norwegian territorial waters.
- 2. It is forbidden to bring ashore in Norway fish caught by foreign trawl vessels or to load the catch from one vessel to another in a Norwegian harbor or such fish brought in from the fishing banks. Likewise, foreign trawlers are forbidden to seek shelter on the Norwegian Coast or to transfer fish from one vessel to another.
- As long as a fishing vessel with trawler equipment is in Norwegian territorial waters outside of a harbor, the whole fishing equipment shall be stowed away in the ship.

- 4. Vessels which come to the fishing banks where other boats are already carrying on fishing shall not set up their own fishing equipment so near other vessels and their equipment that they, in an unreasonable way, prevent the other vessels from carrying on their activities.
- Fishermen fishing with trawl equipment shall take care that they do not cause damage to the nets, and other fishing equipment of other fishermen.
- 6. When vessels are fishing with nets or lines, vessels carrying on fishing with trawl equipment shall not come nearer to them than a nautical mile.
- 7. When vessels fishing with trawl equipment come near places marked by nets or lines during the day or in the night by lights which show where these lines and nets are, and which have been left there by fishermen, then the trawler shall not carry on operations nearer than a nautical mile from such marks or lights and shall in no case carry on fishing between two such marks or lights.
- Inspection ships shall, where conditions allow it, call the attention
 of trawlers to nets or lines which have been set out in the sea where
 they are situated.
- 9. If any injury is done to such nets or lines, trawling vessels which have been fishing in the vicinity will have to furnish proof in a court that the injury has not been caused by them, excepting circumstances where proof is unnecessary.
- 10. Before a trawler vessel begins its fishing operation, it shall make its position known by putting out a buoy showing the directions. The trawlers must not fish farther away from such a buoy than one nautical mile when there are fishermen's nets and lines on the banks.
- 11. The King can decide that the use of trawl vessels shall be forbidden all year around or at a certain time of the year in certain parts of the fishing banks.
- 12. The one who breaks this law or regulation or who takes part in such an action is punished with fines up to 20,000 kroner.
- 13. The King can give the captain of a vessel of inspection authority to fine persons for breaking par. 3 and 8 of this law and par. 10 and the rules in ... the criminal law which deals with regulations to prevent collision by the ships or with reference to SOS signals or unloading the catch.
- 14. If the misdemeanor has been committed by a member of the crew and the responsibility for this action can be placed on the shoulders of the captain of the ship then the member of the crew who committed the actual act shall not be punished.
- 15. The regulations in this law shall not affect the use of shrimp trawlers.
- 16. The regulations in this law shall not affect research work in the fisheries which is being carried on by the State.
- 17. The stipulations in this law do not affect the use of shrimp trawlers. However, the stipulation in par. 3 about stowing away the equipment under certain circumstances also pertains to shrimp trawlers if the shrimp trawler is of that class that it comes in under the law which does not allow its use inside territorial waters.
- 18. This law goes into force April 1, 1939, because we have sanctioned this law under our hand and seal given at Oslo Palace, 17 March 1939.

At a recent convention of the Oslo Association of Civil Engineers, an address was made by Mr. Jan L. Backer in behalf of trawl fishing. Mr. Backer of Kristiansund is engaged in the operation of a fleet of trawlers and in the marketing of fish; in addition he has interests in the lumber business.

"We are carrying on our cod fishing by methods 2,000 years old.

"During the 90's of the last century, a new method of fishing was introduced; namely, by the trawler. In 1900, Great Britain had 1,100 steam trawlers and in France, Belgium, the Netherlands, and Germany we find the same development.

"The fishing nations of northern Europe have, by means of the trawler, increased their total catch from $2\frac{1}{2}$ million tons in 1910 to $3\frac{1}{2}$ million tons in the years before the last World War, but Norway's share in this catch has, during this period, gone down from 47 percent in 1914 to 28 percent in 1932. It is true that Norway has also increased and modernized her fishing fleet in this period, but she has followed the old methods of fishing by line and net which has been known for over 2,000 years and has not, therefore, gone over to the new method of fishing out on the open ocean with trawlers.

"In the 10-year period-from 1930 to 1939-the Norwegian fisheries amounted to one million tons of fish per year, including herring, and it had a value of 80 million kroner. Of this amount, the cod fisheries amounted to 22 million kroner or 27 percent of our total catch.

"Trawler fishing is almost entirely devoted to catching cod."

The speaker than spoke of the attempt that had been made in his country to carry on fishing with trawlers.

"The first attempt was made at Stavanger at the beginning of the century. In 1936, Norway had 8 trawlers--Kristiansund had most of them. The fishing showed good results, but then we got the temporary trawler law of 1937 and the permanent law of 1939 which put a stop to this development in our country."

According to the speaker, the situation in Norway is this:

"The Norwegian fishermen wait for the fish to come up to the coast on the different fishing banks along the coasts, but the foreigners to after the fish, going long distances from shore in their big trawlers where they can catch the fish at all times of the year, while in Norway the fishing is divided into seasons; i.e., limited to those periods when the fish come within Norway's territorial waters along the coasts. For that reason, there is a big difference between the catching of fish in Norway and these other fishing nations, and the results are accordingly.

"In the Norwegian fisheries, there are almost as many boats as men. This puts the Norwegian fisheries on a very individualistic basis, but it isn't a modern system, because it limits the fishing to the coast and the fish cannot be sought out on the open ocean where they are to be found at all times of the year. It is too risky to go out there with small sailing vessels or small motorboats."

The speaker rejected the theory that fishing with trawlers is injurious to the fish in any way; namely, that the trawlers destroy the food of the fish and the fry.

"Trawler fishing will not take bread away from our fishermen nor does it have to create unemployment, but, on the other hand, it will secure for our fishermen a larger income. The fishermen can carry on their catch the entire year and not only during short seasons. It is an actual fact that the ordinary coast fishing brings a loss both to the fishermen themselves and to the State which must give large subsidies at the present time. In spite of these subsidies, Norwegian fishing has become too high on account of the obsolete methods of catch and cannot, therefore, compete as it should on the world market. For years, we have had a crisis in our cod fishing and this will become chronic and permanent if something is not done to remedy the matter.

"Other countries have increased and extended their production of fish while ours has stagnated, it does not only hurt our fishermen, but also to a high degree, the many workers on land whose vocations are closely connected with the cod fisheries.

"Taking Norway's share of the fisheries of the far northern waters, like around Bear Island, the Barentz Sea and the West Coast, it has gone down from 84 percent in 1925 to 34 percent in 1936, while the British, German, and Iceland catch has gone up accordingly. It is at our expense that Iceland and others by their better technique and effective rationalization have become more successful year by year. Thanks to her cheaper means of production, better methods and better boats, Iceland has conquered our old markets. We must look that fact in the eye that our coast fisheries have really ceased to become a paying proposition for the great majority participating therein."

Another speaker spoke about Norway's trawler laws, which he criticized very sharply. He pointed to their unreasonable stipulations which make it possible for foreigners to fish along the Norwegian Coast outside territorial waters with trawlers while Norwegians are forbidden to do so. Mr. Backer, however, pointed out that the Norwegian trawler fishermen did not seek to get fish inside of Norwegian territorial waters to the exclusion or disadvantage of foreigners. It was his opinion that fishing inside of territorial waters along the coast could be left to the fishermen who wish to carry on the catch in the old way if they found that it paid them at all.



Uruquay

EXPANSION OF FISHERIES: The State Department recently announced the passage of two laws, effective October 26, 1945, by the Government of Uruguay, relative to the reorganization of the "Servicio Oceanografico y de Pesca" (S.O.Y.P.) as a decentralized service under the Ministry of Industries and Labor, in accordance with information received from the United States Embassy at Montevideo, Uruguay.

One of the laws establishes a regime for the Servicio as a special decentralized service under the Ministry of Industries and Labor, and the other provides for the financing of the regime by means of the issuance of internal debt bonds in the amount of five million pesos.

Under the Decree, the agency will undertake the following tasks:

- To develop fishing in the ocean, the rivers and the fiscal lakes of the country.
- To industrialize all the products of such fishing when it believes it expedient.
- To sell and develop the products and byproducts of fishing, either in their natural state or after their elaboration.
- 4. To establish ice factories to meet its own needs, being empowered to sell any surplus to the public.
- To establish freezing chambers for the preservation of its products and for rental to private individuals.
- To encourage and favor the creation of fishermen's colonies and cooperatives, as well as any private activity with marine fishing as an objective.
- 7. To establish oceanographic museums, biological, chemical, and oceanographic laboratories, and, in general, to promote all scientific activity, the object of which is the study of marine flora and fauna and other branches of oceanography.
- 8. To provide Uruguayan rivers, streams, and lakes with the most suitable species and with those giving the most remunerative return; and to establish oyster beds and other mollusk beds in general.

- To exercise sanitary control over the sale of fish and fish products, either fresh or manufactured, as also over its domestic manufacture and other similar imports from abroad.
- 10. To emforce all legal dispositions and all regulations connected with fisheries, without prejudice to such intervention as may correspond to the municipal and national authorities.

Two points in the law which sets up the regime are worthy of special mention. First, Article 20 permits the contracting of foreign personnel for technical work, although employment of personnel on board the organization's boats must be in accordance with the law governing the national coasting trade. Second, Article 23 provides that any private fishing enterprise, if it feels that the S.O.Y.P. is obstructing its activities or prejudicing free competition, may make an appeal to the executive power.

This law is similar in nature, but more elaborate in detail, to a draft law proposed several years ago. Although that project law was presented to the General Assembly, it never was passed, and, until the present time, no legislative action was taken to strengthen the existing Fisheries Service.

It is believed that this reorganized state undertaking may provide the population of Uruguay with an important additional source of food which, to date, has figured very little in the national diet, and, by so doing, may benefit indirectly the national economy.



MAN'S QUEST FOR FOOD: The need of more food to feed an ever-increasing population has brought a large part of the arable lands of the world under cultivation. Forests have been leveled, swamps drained, and deserts irrigated. Experiments are even being made in soilless agriculture. Concurrently, fishing frontiers have been pushed farther and farther out to sea and along the coast lines of the world. Now many species of fish are pursued over thousands of miles of ocean—throughout their range of distribution, in fact. In expanding these frontiers, species new to the commercial world have been found in abundance and exploited.

For several centuries after the Renaissance, fishing and farming advanced at more or less comparable rates. When the Hanseatic League was flourishing, the world saw the rise of the great herring and other fisheries in the Atlantic off Western Europe and the rapid increase in agricultural production in Central Europe. During the colonial period in North America also, fishing and farming marched along at comparable rates. But in more recent times, especially since the middle of the nineteenth century, agriculture in North America has far out-distanced the fishery industry. In general, this has also been true throughout the rest of the world. As long as more land could be brought into production, less and less consideration was given to the sea as a source of food. Recently, however, the trend has reversed, and greater attention is being given to exploring fishery resources and tapping their wast stores of animal protein food. If this trend continues at its present rate, the seven seas will be combed for food fish as they were for whales in the first half of the nineteenth century by the ships from Nantucket and New Bedford.

NOTE: This article is based on "La pesca y las industrias pesqueras en el Perú," a report of the United States Fishery Mission to Peru in 1941.