



Argentine Republic

SHARK LIVER OILS: The catching of sharks for the production of vitamin-rich liver oil appears in 1947 to have continued the decline which has been taking place in Argentine waters since the peak year of 1944, according to the American Embassy in Buenos Aires. However, the level of activity is still much higher than in all years prior to 1944. According to the Ministry of Agriculture, the catch of sharks in 1947 amounted to 6,660 metric tons as compared to 7,521 tons in 1946, and 10,303 tons in 1944. In 1938, 10 years previously, the catch was estimated at only 7 tons.



The current decline is explained as being due more to difficulties in finding sufficient fish than to lack of price incentive. Semi-refined (washed with caustic soda) shark liver oil, at present, is quoted in Buenos Aires at 27 to 30 cents per 1,000,000 units of vitamin A, f.o.b. This price is regarded as being above the prevailing level in the United States. Bidding in the Argentine market has recently been stimulated by the purchasing activities of French interests, who are understood to have in mind refining the oil for eventual re-sale to U. S. outlets.

According to unofficial tabulations (see table) exports of shark liver oil from Argentina in 1947 amounted to 334 metric tons. Of this volume, about 50 tons is thought to have been carry-over from 1946 and 34 tons was tare, thus giving a net 1947 production of 250 tons of oil. This estimate squares closely with the Ministry of Agriculture's figure of 246 tons. The shipment of 1947 production is thought to represent between 12 and 15 trillion units of vitamin A. The average potency for Argentina is around 60,000 units per gram, factor 1894, according to one leading trade concern. The official estimate of 1946 production of shark liver oil was 285 tons.

Government fishery technicians believe that a part of the decline in shark catches is due to the practice of fishing with multi-hooked lines instead of nets and the consequent tendency to kill or fatally injure females or young sharks of both sexes when a return to the seas is attempted, if indeed it actually is attempted. There also may have been considerable overfishing. After several good years off Mar del Plata, fishing crews found it necessary to move southward to Nechochea. Later, when catches again dwindled, activities were extended to Bay San Blas. During the past season, fishermen have encountered only fair luck as

far south as Camarones on the coast of the Territory of Chubut, considered the southernmost limit of practical operations.

Argentine Exports of Fish Oils - Year 1947 and January-February 1948
(In metric tons)

Country	SHARK LIVER OIL		OTHER FISH OILS	
	1947 (12 months)	1948 Jan. & Feb.	1947 (12 months)	1948 Jan. & Feb.
Belgium	-	-	624.3	55.6
Colombia	-	-	10.9	-
Czechoslovakia	-	-	280.1	-
Denmark	0.4	-	-	-
France	82.3	6.7	-	-
Holland	0.6	-	144.4	-
Ireland	-	-	-	111.7
Italy	-	-	228.3	-
Norway	3.7	-	-	-
Sweden	5.5	3.1	-	-
Switzerland	-	-	55.5	-
United Kingdom	106.1	1.9	209.9	-
United States	141.2	24.4	-	50.0
Venezuela	0.2	-	-	-
Totals	340.0	36.1	1,553.4	217.3

FISH OIL AND MEAL: The principal source of fish oil, other than that extracted from shark livers, is the sábalo (*Prochilodus platensis*). It is taken mostly in the Uruguay River near Gualaguaychú. This fish feeds on the surface at times in great schools and is caught with nets suspended across the river. The haul is immediately boiled whole in large vats and the oil is obtained partly by flotation and partly by subsequent pressing of the resultant meal.

The Ministry of Agriculture estimates that 16,951 metric tons of sábalo and other fresh-water fish were processed in 1947 for oil and meal, as compared with 9,457 tons in 1946. The 1947 oil yield is computed at 2,005 tons as compared with 954 tons in 1946. Meal production in 1947 is reckoned at 2,132 tons as compared with 1,841 tons in 1946. In addition, a small additional lot of 21 tons of meal was processed from ocean fish in 1947, about 26 tons less than in 1946.

The production from the whale catch by Argentine vessels in 1947 is reported by the Ministry of Agriculture to have been 8,849 metric tons of oil, 4,754 tons of guano, and 338 tons of meat meal. In 1946, the respective totals were 8,330 tons of oil, 5,016 tons of guano, and 262 tons of meat meal. It appears, therefore, that whaling by Argentine interests is being maintained at about the same level, due in part to the fact that no additions have recently been made to the fleet of vessels.

In connection with the whaling situation, it was announced at mid-April that the Ministry of Agriculture would establish a service of inspection for frozen or salted whale meat with a view to facilitating its acceptance abroad for human consumption.



Australia

STATUS OF TUNA FISHERY: Tuna is neither being caught nor frozen by any Australian concern at the present time, according to an American Consulate General

report from Sydney, Australia, dated April 28, 1948. There is, however, considerable interest in establishing a tuna industry, but as yet, no concrete action has been taken.

Informed sources are of the opinion that any contemplated fishing for tuna would be done in Australian, not Japanese, waters. It is also expected that the fish would be canned rather than frozen.



Canada

CANADA FISHERIES ASK REVISION OF U. S. TARIFF ON CERTAIN FISH ITEMS: Resolutions requesting revision of the United States customs tariff on salt fish, canned salmon, and canned tuna have been referred to the Departments of Fisheries and Trade and Commerce, according to the April 1948 Fisheries Council of Canada Bulletin. The Canadian Department of Trade and Commerce has advised that these items have been noted for negotiation with the United States whenever the opportunity becomes available, and they will be glad to receive briefs from the industry for the guidance of the Department in preparing representations to the United States authorities. The council has been accorded an opportunity to appear before the Standing Committee on Banking and Commerce of the House of Commons on May 11 to present the views of the industry on the Geneva Trade Agreements.

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FISHERIES TRENDS: In the disposition of the first quarter 1948 catch of Atlantic Coast fish, more cod is being frozen and smoked in the filleted form than a year ago, according to the April 1948 issue of the Monthly Review of Canadian Fisheries Statistics, Dominion Bureau of Statistics. The production of fillets of haddock and other groundfish has also been increased. Almost the entire lobster catch has been sold in the shell. Major adjustments on the west coast include the greater use of herring for reduction, and a switch from the canning of other shellfish to the sale of this product in the shucked meat form. Imports of fresh and frozen cod and other groundfish from Newfoundland, pickled herring from the United States, and canned sardines from Norway have all expanded considerably over the same period of 1947. Exports of fishery products to the end of March totaled \$23.8 million this year in comparison with \$20.5 million during the first quarter of 1947. The increase was mainly to the United States in the fresh and frozen forms.

No significant change is noted in prices received by fishermen or in the wholesale and retail trades. However, in April, prices received for cod and related species tended to be higher on the Atlantic Coast.

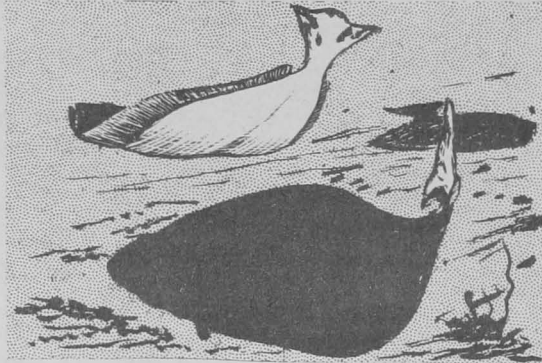
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HALIBUT FISHING IN BRITISH COLUMBIA: The halibut season opened on May 1, 1948, amid predictions that it will be the most intensive and thus the shortest one on record, according to a report from the American Consulate General at Vancouver. Area 2, off the British Columbia coast, the region of chief interest for fishermen here, has a quota of 25,500,000 pounds fixed by the International Halibut Commission. This quota is 1,000,000 pounds larger than last year's quota, which was exhausted in 39 days by the fishermen of British Columbia, Washington,

and Alaska. Last season, halibut fishermen in this Province, aided by a two weeks' tie-up of the halibut fleet in Seattle, Wash., landed 26,223,000 pounds of halibut, valued at \$5,950,000.

Prince Rupert is the focal point for halibut operations in British Columbia, being nearer the halibut grounds than is Vancouver. However, when the price differential is sufficiently attractive, some fish are landed in Vancouver. Prices paid to the fishermen for halibut are competitive and based on market trends. Prices in British Columbia during 1947 ranged between 16 and 25½ cents per pound for mediums and between 13 and 24 cents per pound for chickens and large.

According to the Dominion Bureau of Statistics, 13,959,000 pounds of fresh and frozen halibut, having a value of \$3,188,457, were shipped to the United States from Canada in 1947, as compared with exports of 4,377,000 pounds, valued at \$964,194 in 1946. As only about one-twelfth of the halibut catch in Canada is from the Atlantic Coast, it is apparent that the bulk of the halibut exports to the United States from this country originated in British Columbia.



Egypt

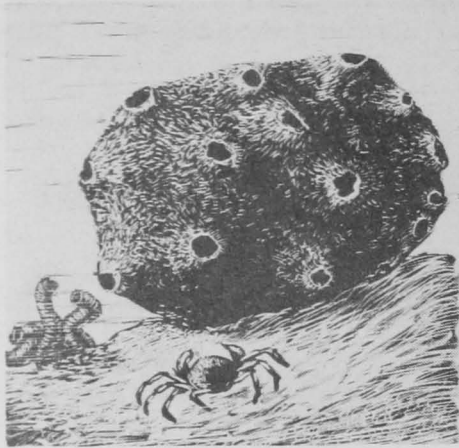
SPONGE CULTURE: Production: The sponge fishing monopoly for the Mediterranean coast of Egypt, west of Alexandria, is held by one company. There is no sponge fishing east of Alexandria because sponge production is insignificant in this area. According to the American Consulate at Alexandria, the following types of sponges were produced during a period of two months in 1947:

Type	G R A D E				Total
	1st Lbs.	2nd Lbs.	3rd Lbs.	4th Lbs.	(Per type) Lbs.
Turkey cup	- 7,220	1,734	165	-	9,119
Honey combs	- 13,530	5,361	2,698	129	21,718
Zimocca	- 994	476	240	-	1,710
Total	- 21,744	7,571	3,103	129	32,547

Exports in 1947: There were no exports of sponges because the short season in which the sponges are collected ended November 30, 1947, when the cholera epidemic was at its peak. Consequently, the agents of foreign firms were unable to enter Egypt to purchase sponges. Wartime restrictions on fishing caused Egyptian sponges to disappear from the world market for several years. Recently, American firms have begun to show interest in buying Egyptian sponges. One important American concern has sent a representative to examine the quality of local sponges, and if found satisfactory, to purchase. It is understood that other American sponge buyers are also planning to send representatives to Egypt.

Stocks on Hand: Since there were no exports of Egyptian sponges in 1947, and because there is almost no local demand, the local production figures for 1947 may be considered as the stock of Egyptian sponges on hand.

Current Prices: There have been no exports nor local sales of Egyptian sponges since the war. Current prices therefore cannot be determined. But some estimates may be made by comparison with Libyan sponges which were sold in Greece for \$16.00 per pound, the quality of which corresponds approximately to the Egyptian "honey comb," which is about 10 percent more expensive. Therefore, the price of this species would be about \$17.60 per pound. The Turkey cups or silks in this case should be valued at 50 percent higher and the average current price may be \$25.00 per pound. There are no quotations for the zimocca brand at present.



EASTERN MEDITERRANEAN SPONGE

Present Demand: The local demand for Egyptian sponges is practically insignificant, due to the fact that these are not used for industrial purposes in Egypt. The good quality is utilized for bathing purposes, whereas the poor quality is used for automobile and lead print cleaning, etc. America is the largest consumer for fine quality sponges, the United Kingdom is the second largest.



Germany

BIZONAL FISH IMPORTS: The Office of the United States Political Adviser for Germany reports that with the recent conclusion of a trade agreement between the United Kingdom and Sweden, the contracts signed up to the present time provided for the import of approximately 270,000 tons of fish for the bizonal area for the year 1948-49. This tonnage is slightly more than the estimated German catch for that period and is more than double last year's imports of 120,000 metric tons.

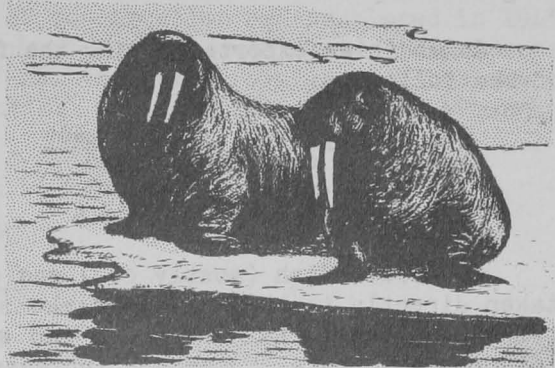


Greenland

FISHERIES OF GREENLAND: It is the wealth of marine animal life which makes Greenland habitable, according to the Danish Foreign Office Journal. Ten species of whalebone whale and six different toothed whales move up and down the coast--the Greenland whale, the cachalot, the blue, humpback and Rudolphi whales, the grindhval, and the gladiator whale. The last-named is a voracious animal that preys on the smaller species of whale, the white whale and the narwhal, which tend to appear in large schools, especially in the waters of northern Greenland. These small whales are hunted by the Greenlanders with great zest; the larger whales are caught by a special whaling ship under Government direction.

There are seals everywhere, and, down to the most recent times, they used to form the absolute basis of human existence. At few places in the world is there any parallel of a single species of animal supporting and influencing the whole life of a people. The Greenland seal, the ringed seal, the bearded seal, the

harbour seal, and the bladder-nose (or hooded) seal are the five species met with in Greenland waters. Besides these true seals, large walrus colonies may be met with from Holsteinsborg on the west coast and northwards, as well as on most of the east coast north of Angmagssalik; but they have never been of importance in the life of the people. The above-mentioned seals are resident only to a slight extent in the waters around Greenland; and the increasing and systematic hunting of them in their breeding grounds has had a marked effect on the numbers which migrate to within reach of Greenland.



About 100 species of fish occur in Greenland. The charr is found in fresh water and is eagerly fished in the summer, when it migrates along the rivers to and from the lakes. The true salmon is found only in a few localities and is of slight importance. On the other hand, the small herring-like fish, the caplin (called by the Greenlanders the "angmagssat"), is of the utmost importance as human food and food for dogs. In the summer, they penetrate into the fjords in large shoals and are netted by the ton. They are dried and stored for the winter. The largest sea fish is Greenland shark, which is caught for the liver; it is abnormally large and yields oil which is extracted by a special melting process. The flounder used to be of special importance, as it was canned and exported. The fishing of it has now almost ceased since the fish is no longer found in the known grounds. Other fish caught are halibut, Greenland or blue halibut, sea scorpion, fjord cod, lump sucker, and the Norway haddock (rosefish). But excelling them all in value is the cod or "kabliau." Formerly, fishing was regarded, in Greenland, as a second-class occupation. Only those who were too incapable or infirm to hunt seals in a kayak would descend to cod fishing. Today, after 20 years of rapid development, it is the great national occupation. Year by year, the production of salt fish increases.

The future of Greenland and its people undoubtedly lies in the increasing, rational development of these fisheries during the next few years. When the canning of flounders ceased, a start was made with prawns, which extended investigations seem to indicate occur in very large numbers in certain parts of South Greenland. Crabs and scallops also occur, besides a large number of pteropods, but these are not fished.



Iceland

FISHERIES REVIEW—FIRST QUARTER, 1948: Exports: Icelandic exports for the first quarter of 1948 were considerably above those for the corresponding period in 1947, largely on account of the record winter herring catch, and the excellent sales made by the trawlers newly acquired from Great Britain, according to the American Legation at Reykjavik.

Principal exports by country of destination were to:

United Kingdom - 34%	United States - 16%	Czechoslovakia - 9.5%
Netherlands - 9%		France - 6%

The only marked difference in respective importance, as compared to last year, was the fivefold increase in value of exports to the United States (owing to herring meal exports from the winter catch).

Commodities exported during the first three months of 1948 consisted chiefly of the following:

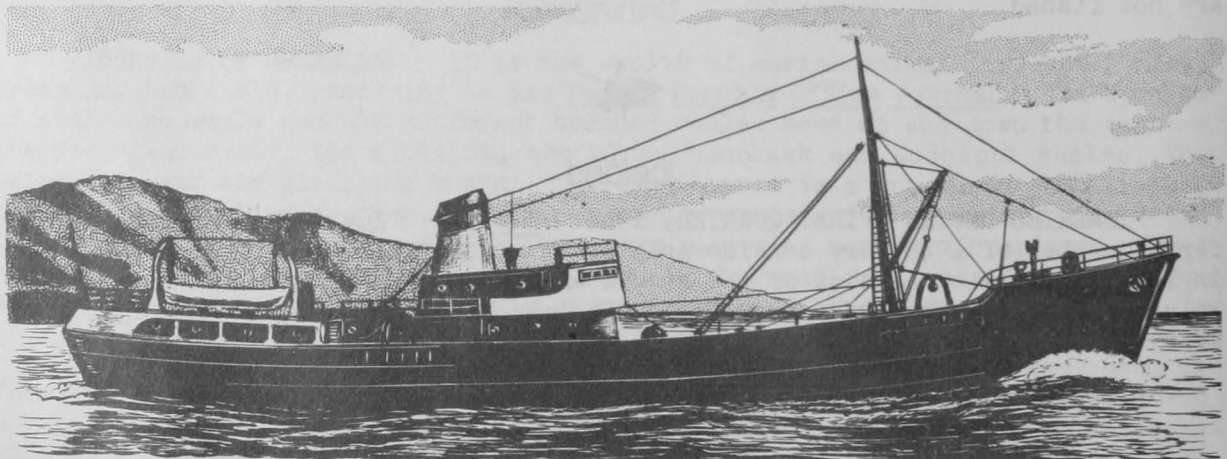
<u>Item</u>	<u>Percent</u>	<u>Countries</u>
Fresh fish	40	United Kingdom
Herring meal	23	U. S., U. K., and Czechoslovakia
Cod-liver oil	8.5	U. S. and U.S.S.R.

The fresh fish (mostly cod) was caught by the trawlers on the high seas and taken directly to the British markets. Icelandic trawlers made 98 "fish-sale" trips to Great Britain in 1948, and sold their catch for around \$3.6 million. This represented a 38 percent increase over the first quarter in 1947, when only 71 trips were made for a total sale of \$2.2 million. This augmentation was largely due to the recent acquisition of new trawlers from England, which have been proving extremely successful. Eighteen of these trawlers (650 tons Diesel powered) were delivered in 1947.

The cod catch of the small boats, on the other hand, which supplies the freezing plants, amounted, in the first quarter of 1948, to only one-third of that for the corresponding period of 1947. This has been caused principally by inclement weather during all of March, and the fact that a number of boats were engaged in the winter herring fisheries at the beginning of the cod season. The total "white fish" catch of these smaller craft for the first three months of 1948 was only 3,300 metric tons, as compared to 9,350 metric tons for the same period last year. The number of boats operated was only around 40, compared with 72 in 1947.

The large sales of herring meal in 1948 resulted from the record winter catch (November - February), which totaled around 140,000 metric tons, as compared to less than 1,000 tons during the winter 1946-47, and around 123,000 tons for the summer of 1947. Very little of the winter production of herring oil (which totaled some 15,200 tons) was exported, however, during the first three months of 1948, as it was being saved for later shipments under special trade agreements.

Sales of herring meal averaged around \$153 per metric ton (somewhat less in sales to the U. S.), which was approximately the same price as last year, while



sales of cod liver oil were made for dollars only at prices ranging around \$600 per ton.

Imports of Trawlers: In fulfillment of construction orders placed in 1945, five new trawlers were received from the United Kingdom (out of about 15 expected this year) for a total cost of around \$3.7 million. The foreign exchange needed for these purchases has already been set aside, and will not, as a consequence, affect Iceland's unobligated reserves.



Japan

PRODUCTS FOR EXPORT: The Office of International trade, Department of Commerce, has released a list of commodities currently being produced for export from Japan. Quantities are not given since volume of output is constantly changing. Requests for information concerning the availability of the listed commodities for export should be directed to the Export Bureau of Boeki Cho (The Japanese Board of Trade), Tokyo, Japan.



Frozen abalone	Canned clam (baby)	Dried abalone
" albacore	" " (Hokki)	" bonito (Katsuobushi)
" clam, baby	" crab meat	" cuttlefish
" cuttlefish	" mackerel, boiled	" oysters
" frog	" oyster, smoked, in oil	" sea cucumber
" octopus	" salmon, pink	" " " (lilac)
" oysters	" sardines, boiled	" seaweeds (Nori)
" scallop	" " , in oil	" shark fins
" snapper, red	" " , pepper	" shrimp
" swordfish	" " , tomato	" tangle (Kombu)
- - -	" tuna in oil	- - -
Agar-agar	" yellowtail, smoked, in oil	Sperm head oil
Fish livers	- - -	Vitamin A oil
Shell buttons	Gold Fish	Seed oysters (available July-Sept.)
Bamboo tuna poles	Fishing jigs and lures	Ramie fishing net twine
	Cotton fishing twine and nets	

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INSURANCE SYSTEMS FOR FISHING INDUSTRY: Three types of fishing insurances are recognized in Japan, according to the Fisheries Division of the Natural Resources Section, General Headquarters of the Supreme Commander for the Allied Powers in Japan:

1. Personal insurance against casualties.
2. Boat insurance.
3. Material and catch insurances.

Because of the large risk and small profit in fishing insurance, neither insurance companies in general nor the Government will insure fishermen against casualties. However, one has granted policies to more than 250,000 fishermen throughout Japan.

Boats are generally insured by the Japanese Government, although some companies offer this type of insurance.

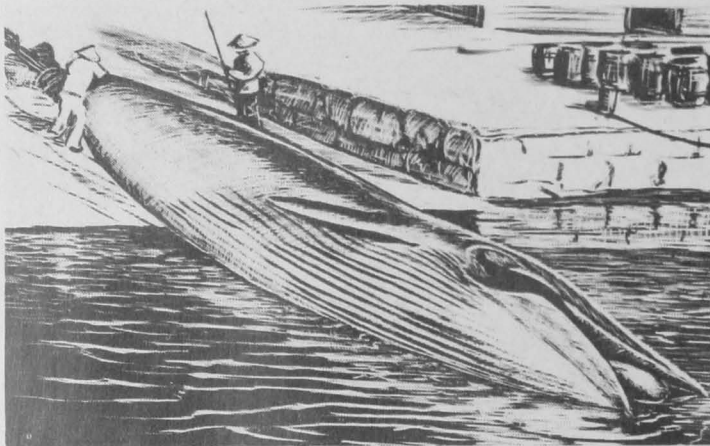
Although various plans for insuring material and catch have been studied, no large-scale insurances of this type have been attempted because of the risk involved.

TREATMENT OF WHALE MEAT: Of the whales caught in Japanese coastal waters, 18,701 metric tons of meat and blubber were consumed as human food in 1946. The exact figure for 1947 is not available yet, but approximately the same amount can be considered to have been obtained from coastal whaling. In addition, 2,721 metric tons of meat and blubber of whales killed in the Bonin Island area were used for human consumption in 1947.

Meat and blubber are preserved in one of the following ways until they reach the consumer:

- A. Frozen: The quantity is very small owing to lack of freezing facilities. Usually it is sent to inland prefectures.
- B. Ice packed: The meat and blubber are washed and cooled with sea water and packed in crushed ice. This is the most common method. It is distributed in Yokohama and Tokyo.
- C. Salted: This is practiced mainly on the whaling mothership, where sufficient ice is not available.

Practically all parts of the carcass are used for edible purposes in Japan, but the main parts are red meat, "Sunoko" (a portion between red meat and ventral groove), blubber, ventral groove, "Oba" (tail fin), and viscera.



SEI WHALE

Fresh or frozen whale meat is appreciated by Japanese as much as pork and beef is by Europeans and Americans. It is believed fresh or frozen whale meat would be acceptable to their taste.

In some localities of Japan, salted ventral groove is as highly appreciated as bacon is in Europe. Salted whale meat is not generally desired, but is acceptable to people engaged in coal mining and farming.

Salted meat before it is eaten is cut into correct size and then put into a pot of hot water. It is stirred until the salt is extracted from the meat. Then the meat is washed with cold water and cooked in the same manner as fresh or frozen meat.

Any part of red meat, "Sunoko," blubber, ventral groove, tail fin, and "dendo" (connective tissue of lower jaw) is salted. This is practiced, however, only when freezing facilities or ice is not available. Special care is used to select the part which contains a minimum amount of fat. It is undesirable to salt the meat in summer when the temperature is more than 80° F.

The fatty tissue is trimmed off as much as possible, but in the case of ventral grooves and tail fins, the fat is usually not trimmed.

Size of the pieces salted are as follows:

- A. Red meat - one square foot with a thickness of two inches.
- B. Ventral groove, blubber, and "dendo" - two feet long, five inches wide, and two inches thick.
- C. Tail fin - sliced at a thickness of two inches.

To salt whale meat, it is cut into correct sizes; the raw material is washed and cooled with sea water; salt is added to approximately 10 to 15 percent of raw material; then it is left in the open air for about 20 hours. During this period, water and blood seep out, and the meat cools to 8° C. Then the final salting is done.

The Japanese do not actually inject any brine into the meat, but when the meat is preserved in a vat with salt, the salt and the water which seeps out from the meat make a brine. Salt amounts to approximately 35 percent of the weight of raw material used. Salt content of the brine caused by seepage of meat juices is 26° Baume (saturation).

Salting is divided into the open-air and the final processes.

- A. Open-air process: This process removes blood and water from meat. Meat, which is cut in 1-foot squares with a thickness of two inches, on which salt is well rubbed, is piled on a grate. A board with a heavy stone is placed on the top of the last layer of meat, thereby applying pressure to the meat for some 20 hours. Quantity of salt used is from 10 to 15 percent.
- B. Final process: Meat which has undergone the open-air process is then salted in a vat or concrete tank which holds about five tons. Quantity of salt used is from 25 to 35 percent, and pressure is applied by placing a weight on the top. Brine is maintained in a saturated state, always covering the surface of meat.

From 5° to 16° C. are the temperatures prevailing in the meat tanks or holds during the catching season and the voyage home. Naturally, the lowest possible temperature is desirable. When fresh material is processed and salted under ideal conditions, there is no indication of fermentation or stench enroute or during discharge of the cargo. However, the preliminary salting in the open-air process is absolutely necessary when superior salted meat is wanted. If this process is omitted, fermentation occurs. The average salt content of the meat when it is retailed is 24.2 percent.

Frozen meat can be kept in sound condition for about one year, ice-preserved meat for about one month, and salted meat for about six months.

Practically all meat is sold fresh, but as refrigeration facilities were not available for the 1946-47 Antarctic Whaling Expedition, 20,385 metric tons of salted products (including 14,666 metric tons of salted meat) were brought back and distributed to consumers in all regions of Japan.

Experiments are being made to improve the palatability and methods of preserving whale products by smoking and by using bacteria and molds. Among whale foods developed by the station are a meat spread and a "whale corned beef."

Mexico

"SAFE CONDUCT" PERMITS CANCELED: It was reported on May 18 that the Ministry of Marine in Mexico authorized the Director General of Fisheries to cancel completely the so-called "safe conducts" ("pasavantes") for fishing by foreign boats.

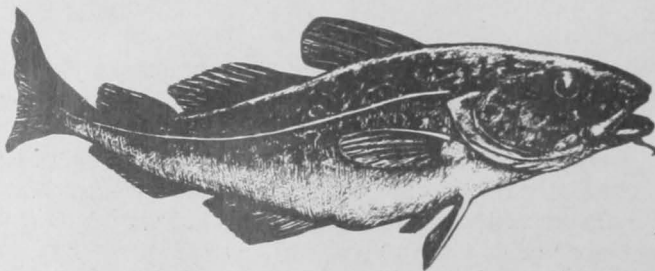
In the past, it has been the practice of the Mexican Ministry of Marine and the Directorate General of Fisheries and Allied Industries to issue safe-conduct permits for fishing in Mexican waters, to boats which had approval of the U. S. Maritime Commission to change to Mexican registry. These safe-conduct permits were issued in order to permit the boats to fish while their papers were being processed for Mexican registry. However, there has apparently been considerable abuse of the safe-conduct fishing permits by groups who did not wish to have their boats transferred to Mexican registry but wished to fish in Mexican waters for a limited period. Normally, the safe-conduct licenses for fishing are issued for a period of 90 days and can be extended for a maximum of 6 months. In accordance with the present announcement, only those boats, the owners of which have completed the entire process of coming under Mexican registry, may now fish in accordance with Mexican law. This order is aimed directly at the shrimp fisheries in the Gulf of Mexico.



Newfoundland

FOREIGN EXCHANGE PROBLEM IN MARKETING 1948 SALT COD PRODUCTION: On May 11, 1948, the Newfoundland Government announced that it would make dollars available to salt cod exporters in order to make possible sales to European countries in the sterling area, according to the American Consulate General at St. John's.

Newfoundland produces for export about 100,000,000 pounds of salted cod each year. At least half of this has been absorbed by European markets, and the loss



COD

of these markets would be a heavy blow to the fishing industry. Exports fell off in 1947 largely because of foreign exchange restrictions, and relatively large stocks were carried over for marketing in 1948. Newfoundland is not in a position to trade dollar for dollar with her European customers, and such trade has been made possible by the use of sterling, convertible

into dollars. Before the war, when two European countries were short of sterling, Newfoundland was able to continue its exports through inclusion in Trades and Payments Agreements made between them and the United Kingdom, and received the dollars needed for its purchases. In 1947, because of abnormal postwar conditions, it was not even possible to convert sterling into dollars, and the Government of Newfoundland had to step in and pay dollars for equivalent sterling deposited in the Bank of England.

In 1947-48, the Government used \$5,643,000 in this manner; as of March 31, 1948, there remained \$10,762,000 in the Government's Canadian dollar account at a

local bank. It is evident that the Government could not continue the assistance extended during 1947 for an indefinite number of years. The announcement dated May 11, 1948, emphasized that the arrangements made would apply only to the 1948 production, and would in no event be possible in subsequent years.

In its announcement, the Government stipulated that:

1. Sales should be made wherever possible to countries in the dollar area, minimizing the need for drawing on the Government's limited dollar reserves.
2. A portion of the dollar payments to exporters would be withheld until the Government becomes satisfied that a fair price is being paid to the fishermen.^{1/}
3. A financial limit for such sales will be set.
4. Further modifications will be made as deemed advisable, following discussions with the Newfoundland Fisheries Board and the trade.

GENERAL FISHERIES OUTLOOK: The first quarter in 1948 was the off-season for the fisheries--Newfoundland's dominant industry. The outlook for the year appeared favorable. Exporters of frozen fillets were confident of expanding their exports to the United States, following the abrupt decline in production suffered in 1947. Thus far, the herring fishery has been poor, giving rise to some doubt that the U. S. Army order of 200,000 barrels destined for Bizonia will be entirely filled. First reports from the seal fields have been encouraging, the prospects being for a season at least as successful as in 1947.

Two important business factors which will bear watching are the degree of success attending the filling of the large 200,000-barrel herring order, destined for Bizonia, and the size of the seal catch.

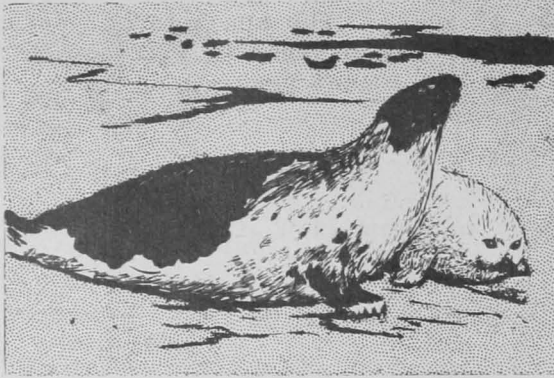
Cod Fishery Outlook: The general outlook for Newfoundland's dominant industry, the salt cod fishery, is for a season approximately as successful as the highly satisfactory 1947 season (production about 125,000,000 pounds).

During the first quarter, most of the stocks of 1947 salted cod were satisfactorily disposed of--mainly to European markets in the sterling area. Such stocks had accumulated after British foreign exchange restrictions had held up shipments to markets in the sterling area, and it was not until the Newfoundland Government intervened with its dollar holdings that the situation was at least momentarily solved. The Government has made no announcement as to whether or not it would again intervene in 1948, although such intervention is widely anticipated. Certainly, if sales are not made to markets in the sterling area, the cod fishery--and with it, Newfoundland's entire economy--would be in dire straits.

Frozen Fillets Outlook: The production of frozen fillets, which fell from over 30,000,000 pounds in 1946 to less than 15,000,000 pounds in 1947, is expected to show at least a slight increase from 1947's relatively low figure. Leading exporters appear confident of increasing sales to the United States, at the same time conceding the virtually complete loss of the war-stimulated United Kingdom market. It should not be surprising, during 1948, to find production exceeding 20,000,000 pounds, practically all destined for the United States.

Herring Fishery Outlook: Some doubt is expressed in fishery circles that the U. S. Army order of 200,000 barrels of herring for Bizonia will be filled.

^{1/}The price paid to fishermen in 1947 is the subject of acute current dispute.



HARP SEAL

Herring are not striking in numbers comparable to recent years, and exporters are pessimistic over chances of entirely filling this important contract.

Seal Fishery Outlook: First reports from the seal fields indicate that the auxiliary vessels prosecuting the seal fishery are succeeding in obtaining a sizable catch, probably comparing favorably with last season. Success at the seal fields, in addition to putting money into circulation, always acts as a psychological tonic to business for the balance of the year.



Nicaragua

VESSELS IN NICARAGUAN WATERS: As a reminder of a procedure that has been in effect since last October, and which applies to both the Atlantic and Pacific Coasts of Nicaragua, the following letter was sent to all shipping agents in Corinto, Nicaragua, on April 6, 1948, by the Port Commander:

"For your information and in order that you may be so good as to communicate it to all captains of the vessels of your principals, I take the liberty of informing you that, on the high seas, when the air patrol of the FAN (Nicaraguan Air Force) appears, they must raise the flag of their nationality. This order is for all steamships navigating in territorial waters or off the coasts of Nicaragua.

"The air patrol plane will circle around the vessel, giving it time to show the flag of its nationality in order to identify it and know what to expect.

"Failure to comply with this dispensable (sic) requirement in territorial waters or off the coasts of Nicaragua might cause regrettable accidents which it is desired to avoid.

"I request you to notify me that this has been received (and) understood so that I may communicate your decision to my superior.

"Note: All steamships must display their name, letters, or identification numbers on the bow and stern."

In view of the above, it is suggested that all United States vessels planning to transit Nicaraguan waters or call at Nicaraguan ports notify their local agents in advance whenever possible in order that air force patrols may be informed.



Norway

HERRING FISHERY, 1948: Norway's greatest herring season closed March 20 with a catch of 865,000 metric tons, presently valued at \$26,157,000 compared with last season's previous high of 530,000 metric tons, valued at \$16,097,000, according

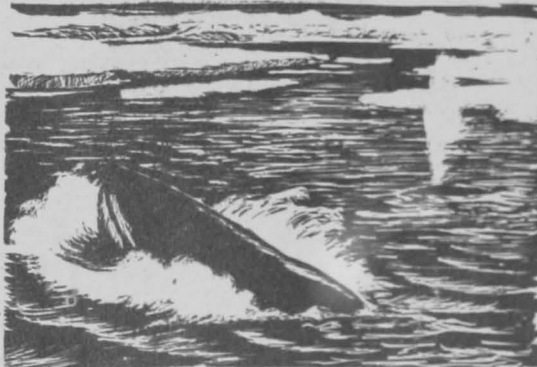
to the American Embassy at Oslo. Additional supplies of herring oil may free whale oil for export and contribute to protein feeds.

Herring meal production during the winter herring fishery this year amounted to over 90,000 metric tons as compared with 50,000 tons produced up to the same time the previous year.

* * * * *

HERRING "THREADING" MACHINE: An experimental machine has been built in Norway for "threading" brisling and small herring on the small rods from which they are suspended during the smoking process prior to canning as "sardines." The machine has only been built on a laboratory scale, according to the Royal Norwegian Information Service, but it is believed it will have a capacity of 15 to 20 "skjepper"—561 to 748 pounds—of brisling per hour and will take the place of 20 to 30 women.

INSULIN FROM WHALES: Aboard Norway's newest whaling factory ship, the Thorshøvdi, launched in Denmark in mid-April, will be a modern hospital and laboratory. The Danish physician, William Sterling, and the Danish insulin specialist, Dr. H. C. Hagedorn, recently returned from three months of research in the Antarctic, have been investigating the possibility of extracting insulin from the pancreatic glands of whales. "In the whale," notes Dr. Sterling, "this gland reaches a weight of 165 pounds, while the pancreatic gland of the pig, from which insulin is normally extracted, weighs a mere 2.6 ounces." Though insulin content of the whale gland is 50 percent lower, it will nevertheless provide over 500 times more insulin than the present source as it is over 1,000 times larger. "Extraction will be fairly expensive," continued Dr. Sterling, "but money cannot be decisive when it is a matter of saving human life."



WHALING, 1947-48: With the conclusion of the 1947-48 Antarctic pelagic whaling season on March 31, Norwegian expeditions had accounted for over 50 percent of the 1,800,000 barrels of oil aboard the international fleet at that time. Production of the 10 Norwegian expeditions totaled 935,902 barrels of whale oil and 54,741 barrels of sperm oil against 903,661 and 33,657 barrels, respectively, for the 1946-47 season. The total value of this season's production is estimated at \$84,500,000. Though the total output was greater, a larger number of Norwegian expeditions participated this year, and output per whale boat per working day was 23 percent below last year's figure. Equipment used consisted of 9 floating factories with 84 killer boats and 1 land station with 7 killer boats.

Poor results are attributed to bad weather and scarcity of blue whales. The Director of the Norwegian Whalers' Association notes that this scarcity represents a dangerous sign, and shows that Norway's warnings in the past have been amply justified.

One hundred thousand tons of the Antarctic production of Norwegian companies has been sold to domestic fat hardening factories for about \$440 per ton.



Peru

FISHERIES RESOLUTIONS: From December 26, 1947 to January 5, 1948, the professional agricultural technicians of Peru held a national conference at Lima to discuss the country's agricultural problems, and desirable policies with regard thereto, according to a report from the American Embassy at Lima. The conference was sponsored by the Asociación Peruana de Ingenieros Agrónomos (Peruvian Association of Agricultural Technicians).

The views of the group on agricultural development were expressed in 79 resolutions. A translation of those resolutions applying to the fisheries of Peru appear below.

ICHTHYOLOGICAL WEALTH

43. To recommend development of systematic studies of Peruvian maritime resources, establishing the necessary protection and control of the ichthyological wealth of our seas, islands, and coasts.
44. To recommend increased exploitation of our maritime resources for the improvement of human and animal nutrition and for the production of fertilizers.
45. To request that existing measures be put into effect to prohibit fishing with dynamite, since this practice is highly damaging to the production of guano, to the biological equilibrium of the ocean, and to the fishing industry.



Poland

EXPORTS OF COD: The Polish Central Fish Organization has recently closed a contract with the Soviet Zone of Germany for the delivery of 10,000 metric tons of cod during 1948 and the first quarter of 1949, according to a report published April 19. This Organization exported 112 metric tons of cod to Germany; 185 metric tons of cod to Austria; 57 metric tons of cod fillets, 30 metric tons of bream, and 10 metric tons of perch to Czechoslovakia; and 18.3 metric tons of frozen salmon to Great Britain.

A representative of the Organization will visit Hungary and Rumania to effect contracts for the export of fish to those countries.



Union of South Africa

FISH OILS--ANNUAL REPORT: Introduction: Valuable oils of a high vitamin potency are now being produced from the liver and visceral oils of certain South African fish, both in Cape Town and at Gansbaai on the south coast, east of Cape Town, according to the American Consulate General at Cape Town. Certain companies produce oil from pilchards which abound around the coast of southern Africa. The vaalhai or soupfin shark has proved to be a very valuable source of liver oil of a high vitamin A potency; the inshore fishing industry is chiefly engaged in shark fishing for production of vitamin oils.

OUTPUT AND VALUE OF INDUSTRY: The annual output of fish liver oil is estimated to be 160,000 imperial gallons and that of fish body oils, 250,000 imperial gallons. The value of the fish and vitamin oil industry is estimated to be approximately \$6,000,000.

FISH OILS: Production: A number of large new plants have been purchased in the United States and installed along the west coast of the Union of South Africa and a very considerable increase in the production of fish oil is expected to take place during 1949. The estimated capacity which will be available in 1949 is 100 long tons of fish per hour, and with the fairly long fishing season, this is expected to produce at least 10,000 long tons of fish oil (and 15,000 short tons of fish meal) during 1949.

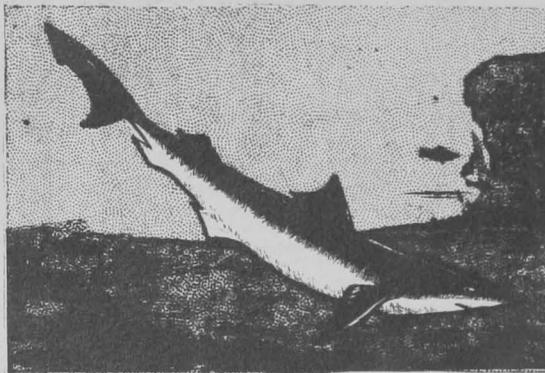
Distribution: Up to the present, there have been no facilities in the Union for the processing of crude fish oils and the small production achieved so far has been largely exported to Australia at prices varying between \$1.40 and \$1.70 per imperial gallon. A small quantity of the oil production has been consumed by the leather processing industries. With the advent of the new refinery, the South African fish oil producers are assured of a new local outlet for the major portion of their production.

VITAMIN A OILS: Production: The production of vitamin A oils in the Union of South Africa, which commenced about 1941, continues to expand slowly as the companies develop their fleets and exploit new fields. The estimated production for 1948 of vitamin A is in the neighborhood of 8,000,000 M.I.U. (Million International Units) about half of which are expected to be derived from soupfin shark and the balance from the livers of various types of edible fish.

Distribution: During the war years, the total output of crude vitamin A oils was sold by individual companies to the British Ministry of Food. Immediately after the war, however, all the various producers of vitamin A in South Africa came together to form jointly a new company which was to undertake the production of vitamin A concentrate in South Africa from the supplies of crude low potency vitamin A oil. This new company is about to go into production. Since January 1948, all producers of vitamin A oil in South Africa have sold their production to this new company for concentration purposes. This state of affairs is expected to continue, since the producers are all shareholders in the concentrating company.

Markets: The entire output of vitamin A concentrate and feed oils will be sold in various parts of the world from 1949 onwards, but for the year 1948, practically the whole production has already been sold on contract to the British Ministry of Food. The prices paid by the concentrators for the raw oil are in line with prevailing world prices and likewise, the price asked for the concentrate will be in accordance with American prices.

FINANCIAL INVESTMENT: During the last year, considerable new investment has occurred in the South African fishing industry. This new investment has chiefly taken the form of the expansion of capital by a large number of existing concerns.



SOUPFIN SHARK

The estimated increase in the capital investment in the fishing industry during 1948 is placed at approximately \$8,000,000, and by far the largest proportion of this amount has been invested in the erection of fish meal and oil plants along the west coast of South Africa. A certain amount of investment in fishing fleets has taken place to supply these fish meal and oil plants.



A new large trawling company has commenced operations from Cape Town with an initial fleet of eight second-hand trawlers purchased in Great Britain. At Dido Valley, Simonstown, a large modern vitamin A concentrating unit and fish oil refining plant has been completed and is about to go into operation.

The Fisheries Development Corporation, a government-sponsored organization, continues to invest appreciable sums of money in small fishing harbors at various points along both the east and west coasts of South Africa.

LABOR: It is computed that there are about 8,000 persons engaged as fishermen, either full or part time. In the byproducts side, there are about 4,000 persons. The majority of the fishermen are non-Europeans.

In the development of the industry, due consideration has been given to the remuneration of the fishermen and workers in the fishing industry generally. The prosperity of the fishing companies and the increased tempo of work in this industry has naturally benefited fishermen and other associated workers.

OUTLOOK: The year 1947 was a year of considerable development in the South African fishing industry, development which has carried over into the year 1948 and the results of which are expected to appear on the world market in 1949, when it is anticipated that there will be limited quantities of crude fish oil for export and considerable quantities of refined and processed fish oil, vitamin A concentrates and low potency vitamin A feed oils.

CONCLUSION: The fish show no sign of depletion among any of the various species taken and the reception of the industry's products by various consumers in different parts of the world outside the African continent is considered to have been very encouraging. The executives of the industry have not been slow to make use of the experience of Americans and Canadians, to employ plant, boats, and equipment found satisfactory in these areas, and also to employ an adequate number of trained chemists and biologists to assist in the further expansion and control of the industry.



Venezuela

FISH PRODUCTION, 1947: The Ministry of Agriculture has announced the 1947 fish catch in Venezuela as being 89,896,235 pounds, according to the American Embassy in Caracas. The catch in 1946 was 80,319,393 pounds.

The increase of 11 percent in the 1947 catch is attributed by the Minister to easier credits to fishermen, sale at cost of fishing equipment, improving transport and industrialization, and to training fishermen in the art of catching more fish.