



International

NORTHWEST ATLANTIC FISHERIES COMMISSION

SUOMELA ELECTED CHAIRMAN OF COMMISSION:

Arnie J. Suomela, Commissioner of the United States Fish and Wildlife Service, has been elected Chairman of the



Arnie J. Suomela

International Commission for Northwest Atlantic Fisheries, the Department of the Interior announced on June 17, 1959.

Suomela was chosen for the position at the annual meeting of the Commission held early in June in Montreal, Canada. He took office upon election. His tenure is for two years. Suomela succeeds K. Sunnana of Norway. Captain T. de Almeida of Portugal preceded Sunnana as Chairman of the Commission.

The International Commission for Northwest Atlantic Fisheries was established in 1951. It is made up of members of 12 nations whose fishermen operate off New England, Nova Scotia, Newfoundland, Labrador, and Greenland. It is primarily concerned with the groundfish (cod, haddock, hake, halibut, flounders, whiting, and ocean perch).

The technical work of the committee is done by the fishery biological research units of the member nations. Recommendations for conservation measures, such as mesh-size limitations, when adopted by the Commission are passed on to the member nations. It is the responsibility of each member nation to effect the necessary measures for the guidance of its own fishermen.

The original ten members of the Commission are: Canada, Denmark, France, Iceland, Italy, Norway, Portugal, Spain, the United Kingdom, and the United States. West Germany and Russia have since become members.

INTERNATIONAL PACIFIC SALMON FISHERIES COMMISSION

FRASER RIVER SOCKEYE SALMON FISHERY TRENDS:

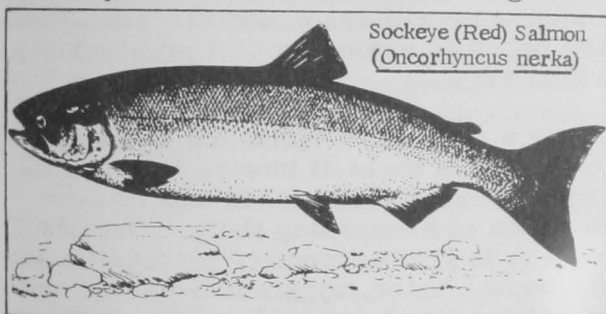
July 27, 1959: United States fishermen failed to harvest their allowable share of the joint Canadian and United States Fraser sockeye catch for the week ending July 25 because of two factors. The fleet size dropped drastically over that in operation for a similar period in the brood year (1955) and gill-net efficiency dropped about 50 percent due to the small size of the fish. In 1955, 150 seines, 60 reef nets, and 400 effective gill nets were operating for the period July 18-21. This year the fleet has dropped to 90 seines, 40 reef nets, and only 175 ineffective gill nets. The United

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States share of the week's catch dropped accordingly from 56 percent in 1955 to 37 percent in 1959 for an estimated total of about 30 percent of the fish available. The original regulations were designed to allow a 40 percent catch of the fish available.

To offset the effect of low fishing efficiency in United States waters, the International Pacific Salmon Fisheries Commission decided on July 27 to increase the United States fishing time for the week commencing July 26 by 24 hours for all gear.

August 11, 1959: Fraser River sockeye runs were fulfilling the most optimistic preseason estimates for a good



Sockeye (Red) Salmon
(*Oncorhynchus nerka*)

sea survival. Normally the runs on this cycle year have always been poor even before the Hell's Gate slide.

The Chairman of the Commission stated that catches were excellent in all Convention waters with the Canadian fleet harvesting an estimated 200,000 sockeye on August 10. The United States fleet also harvested about 90,000 sockeye on that date for a total catch of 880,000 fish. Due to the large escape-ments of sockeye to the spawning grounds, up to August 11, the Commission permitted an extra full day's fishing in all Canadian and United States Convention waters for the week beginning August 10.

The Commission took cognizance of the poor showing of pink salmon up to August 11. To protect against overfishing of that species, expected to appear in the fishery commencing August 16, the Commission approved a reduction of fishing time of 48 hours subject to re-consideration on the morning of August 18,

effective in all United States waters and those Canadian waters lying westerly of William Head. Regulations permitting three-day fishing in Areas 17 and 18 and District I of Canadian Convention waters were not changed.

FOOD AND AGRICULTURE ORGANIZATION

ARTIFICIAL DRYING OF FISH IN AFRICA INTRODUCED BY EXPERT:

Ways and means of improving the fish-drying processes generally practiced in Africa and in other tropical regions has



been under study by the Fish Processing Section, Fisheries Division, Food and Agriculture Organization (FAO) for some time. Sun-drying of fish is the traditional African method, but it is a proc-

ess which is largely dependent on the vagaries of weather and is particularly unsatisfactory during the rainy season. The Chief of the Fish Processing Section decided that it would be possible to dry fish by artificial methods provided a simple, economical plant could be devised for this purpose.

He stated, "I concluded that the essential equipment would consist of a motor and fan and a drying tunnel. FAO arranged for me to visit several countries in Africa, taking with me a gasoline engine and a fan. In advance, I asked the Governments for their help in constructing a simple drying tunnel and sent them the necessary sketches for this purpose."

After visiting the Sudan, the FAO expert went to Uganda where he was able to carry out his experiments in a fish-processing factory on the shores of Lake Edward. Here a new tunnel was built by regional officials and an oven was also constructed.

"This was made out of an old metal container which we used as a sort of brazier," he said. "The experiment was very successful: we dried the fish very effectively in 24 and 36 hours as against the 10 to 14 days taken by sun drying during the rainy season. Unfortunately, however, the dried fish came out brown, because of smoke from the fire. I was

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informed that fish in this condition would be unmarketable, so I decided to experiment again, this time with a new brazier placed lengthwise at the entrance to the tunnel and with a pipe running the length of the tunnel to carry off the smoke and fumes. I was also fortunate enough to get an electric motor from the factory to replace my gasoline motor.

"This meant that the motor could work continuously for the 36 hours required without being refuelled. However, it was still necessary to keep the oven fire alight for that time and a night watchman was put on duty to ensure that this was done."

The result of the new experiment was a batch of prime-quality artificially-dried fish which immediately won the approval of the Uganda fish merchants. Indeed, the fish industry and trade expressed the opinion that this product was superior to most of the traditional sun-dried fish and would not only bring a better price, but would lead to a considerable expansion in the trade.

One important development from the experiment is that the Uganda Government has decided to provide funds to buy the necessary equipment and machinery for artificial drying and establish the process in the lake fisheries.

As most of the salted-dried fish produced in Sudan and Uganda is exported to the Belgian Congo, the FAO expert had included in his itinerary a visit to that territory.

While in Stanleyville, he observed that the retail fish trade was mostly in the hands of women.

"These ladies, usually carrying the babies on their backs, came to the wholesale merchant's shop to buy the fish as it arrived by lorry," he explained. "They were, indeed, very shrewd business women and hard bargainers. The purchase of baskets of smoked fish sometimes needed a whole day."

Apart from the success of his mission in proving that a simple method of arti-

ficial drying of fish could be successfully used in the tropics--an introduction which may bring about an evolution in fish processing in these countries--the FAO expert said that his experience on the trip had shown that there were many physical and psychological factors which limited the introduction of modern fish processing methods in some regions.

Tradition, religion, and taboos often have a strong influence on what may or may not be eaten by a tribe.

"Taboos and eating habits vary from tribe to tribe in Central Africa," the expert pointed out. "For instance, some tribes refuse to eat certain species of fish because they believe the fish cause women to be barren. Others believe that if certain species of fish are eaten, the consumers will get a skin disease. These are only two examples of a great many which exist."

Such consumer habits, beliefs and preferences make it unwise to try to introduce rapidly new foodstuffs or new methods of processing them. The first need is to try to improve the traditional methods. Later, by gradual means, modern fish processing technology can be introduced which can lead to hygienic handling of the fish. But it would be a mistake to think that modern methods and modern plants and equipment can be successfully introduced at once everywhere.

INTERNATIONAL CONFERENCE OF FISH MEAL MANUFACTURERS

An International Conference of Fish Meal Manufacturers was scheduled to take place in Madrid, Spain, October 20-22, 1959. The agenda for the meeting includes general, commercial, and technical subjects on fishery products--fish meal, oil, and solubles. Countries represented included Angola, Denmark, France, Great Britain, Germany, Netherlands, Norway, Portugal, South Africa, Spain, and the United States.

EUROPEAN FREE TRADE ASSOCIATION RECOMMENDED

Ministers from Austria, Denmark, Norway, Portugal, Sweden, Switzerland, and the United Kingdom met at Stockholm

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on July 20-21, 1959, to study a draft plan for a European Free Trade Association, generally called the "Outer Seven."

The official communique issued from this meeting announced that:

The Ministers would recommend to their Governments that a European Free Trade Association among the seven countries should be established. The object of this association would be to strengthen the economies of its members by promoting expansion of economic activity, full employment, a rising standard of living, and financial stability.

They affirmed that another purpose in establishing the association would be to facilitate negotiations with the European Economic Community (the Common Market) and the other members of the Organization of European Economic Cooperation (OEEC).

A draft plan for a European Free Trade Association was approved. The plan is to be published and officials are to be appointed to negotiate an agreement using the draft plan as a basis. The text of this agreement is to be presented to the Ministers by October 31, 1959.

Senior officials engaged in negotiating the agreement were designated as an official committee to advise governments on questions arising out of the establishment of the Free Trade Association.

The draft plan contains the following main points, according to a Swedish Embassy release:

Internal import duties on industrial commodities are to be gradually abolished between July 1, 1960, and January 1, 1970, according to a fixed time schedule. On July 1, 1960--the same date as the second reduction of import duties within the Common Market--the members of the Free Trade Association would reduce internal import duties by 20 percent. Thereafter at intervals of 18 months--12 months from 1965 and onward--internal tariffs would be re-

duced by 10 percent each time so as to be entirely abolished by the end of 1969. This draft plan proposes to follow about the same tariff reduction schedule as the Common Market.

Quantitative restrictions on imports from other "Outer Seven" members also would be gradually abolished during the transitional period.

Each member would control its own external tariffs and complaint procedures would be provided to take care of harmful deflections of trade arising out of differences in external tariffs.

To be entitled to the tariff reductions a product would have to originate within the Free Trade Association or, in general, have at least 50 percent of the same value added in the area.

Serious difficulties arising in special sectors of industry or in special geographic areas would be covered by escape-clause provisions.

Rules governing restrictive trade practices also would be included. Agricultural products are to be governed by a special agreement, according to a decision of the Ministers. This agreement would set out agreed objectives of agricultural and food policy, and would be designed to facilitate expansion of trade between members. Fish and other marine products would be treated separately as an independent problem.

The Foreign Minister of Denmark, during the Ministers' meeting, made a statement on behalf of the Danish, Norwegian, and Swedish delegations with reference to the negotiations for a common Nordic Market. The statement dealt with the progress made toward the adoption of a draft plan for a Nordic Market and the decision at the Nordic Prime Ministers' meeting held July 11-12 to adapt the plans for Nordic economic cooperation to the proposed European Free Trade Association.

After the meeting in Kungälv, Sweden, of Ministerial delegations, headed by the Prime Ministers of Denmark, Norway, Sweden, and Finland, a communique was issued stating that consideration had

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been given to final Committee reports proposing a Nordic customs union, expanded cooperation in commercial policy, production, investment, exploitation of power resources, problems of finance and currency, research, and education. In addition to the agreement among the delegations for the need to adapt the Nordic Market to the Free Trade Association, the other significant decision was to present to the respective Cabinets of the countries a plan to establish a permanent Nordic Council of Ministers. (Foreign Commerce Weekly, July 3, 1959.)

Note: Also see Commercial Fisheries Review, May 1959 p. 42, February 1959 p. 40, January 1959 p. 13.



Australia

MARINE-OIL PRODUCTION, FOREIGN TRADE, AND DISTRIBUTION, 1956/57-1958/59:

Marine-oil production in Australia is confined almost entirely to oil from whaling by five land stations (including the one on Norfolk Island).

Whale-oil Production: The Australian 1956 whaling season, which commenced on May 25 and closed on October 21, was not as successful as those of recent years. Unfavorable weather conditions prevented the two west coast stations from obtaining their full quota, and as a result production of oil showed a substantial decline from the previous year. The total number of whales taken in 1958 was 1,812, of which 120 humpback whales were caught by the Norfolk Island station. Production of oil in 1958 amounted to 3,901,350 Imperial gallons as compared to 4,118,640 gallons during the 1957 season. The three stations also produced 8,859 long tons of whale meal, dried solubles, and meat for pet food.

The oil yield per whale for the 1958 season was the highest on record, with average recovery per whale at 53.80 barrels (40 Imperial gallons each). On the east coast the average was even higher, and was estimated at about 60 barrels per whale. A slight increase in

the average size of whales taken and installation of efficient recovery equipment is mainly responsible for the increase in

Table 1 - Australian Supply and Distribution of Whale Oil, Fiscal Years 1956/57, 1957/58, and 1958/59

Supply	1958/59 ^{1/}	1957/58 ^{2/}	1956/57
. . . . (Imperial Gallons)			
Opening stocks January 1 ^{2/}	430,799	904,176	765,141
Production ^{3/}	3,901,360	4,118,640	4,945,881
Imports	80,000	79,693	86,020
Total supply	4,412,159	5,102,509	4,945,881
Exports	3,300,000	4,021,710	3,428,066
Local consumption ^{2/}	650,000	650,000	613,639
Closing stocks, December 31 ^{2/}	462,159	430,799	904,176

^{1/} Forecast.

^{2/} Estimated.

^{3/} Includes Norfolk Island production.

Source: Production from Bureau of Fisheries, foreign trade data from Bureau of Census and Statistics.

yield. Accordingly, the lower production in 1958 was solely due to the reduced numbers of whales taken on the west coast. On the other hand, output of whale meal

Table 2 - Australian Foreign Trade in Fish and Marine-Animal Oils (Excluding Whale Oil), 1956/57-1957/58

Products	Imports		Exports	
	1957/58	1956/57	1957/58	1956/57
. . . . (Imperial Gallons)				
Cod-liver oils (incl. refined)	38,390	72,394	} ^{1/}	} ^{1/}
Fish oils, unrefined, incl. penguin & seal oil	96,577	97,668		
Other marine-animal oils	17,352	24,483		
Total	152,319	194,545	3,343	3,270

^{1/} Breakdown not available.

and dried solubles in 1958 increased 645 tons as compared with 1957 as a result of improved recovery techniques and possibly the processing of an increased number of sperm whales.

Consumption of whale oil in Australia increased sharply during 1956/57 as a result of the installation of processing equipment by the oleomargarine industry following an increase in manufacturing quotas. Consumption of whale oil by that industry jumped from about 250,000 gallons in 1955/56 to 613,639 gallons in 1956/57, and is estimated to have risen to 650,000 gallons in 1957/58 and 1958/59. Whale oil exports during 1958/59 are expected to be substantially smaller than a year earlier. Whale oil from the 1956 Norfolk Island station catch had to be stored there for some time, occasioning a significant build-up in Australian stocks. The oil was shipped to the mainland during the following year, and helped to

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raise exports in 1957/58 to record proportions. In 1958/59, however, stocks are back to normal and whale-oil exports are limited to the quantity in excess of local requirements, or about 3.3 million gallons.

Imports of whale oil for the fiscal years 1956/57 and 1957/58 averaged 82,856 gallons (about 90-95 percent from New Zealand).

Prices: Prices realized on the United Kingdom market for Australian whale oil were lower in 1959 than for 1958, and have fluctuated between £70 and £72 (US\$196.70-202.32) c.i.f. per longton United Kingdom ports.

Table 3 - Australian Imports and Exports of Whale Oil, Fiscal Years 1956/57 and 1957/58

	1957/58	1956/57
Imports: 1/	... (Imperial Gallons) ...	
(Country of Origin)		
United Kingdom	5,273	-
New Zealand	74,381	77,774
Other British countries	-	8,246
German Federal Republic	39	-
Total imports	79,693	86,020
Exports:		
(Country of Destination)		
United Kingdom	2,209,446	1,497,062
German Federal Republic	211,347	770,919
Italy	569,902	490,994
Sweden	769,790	-
Netherlands	-	669,091
Other	261,225	-
Total exports	4,021,710	3,428,066

1/ Shipments from Norfolk Island not considered as imports.

Whale meal and solubles are under export control and are subject to approval by the Department of Primary Industry. It appears, however, that for the 1958/59 season export permits have been granted for about 2,000 long tons of solubles. During the 1957/58 season exports of all meat meals (including whale meal) totaled only 407 long tons, and the easing of export restrictions seems to indicate that the shortage of high protein feed is not as serious now as it has been for some years.



Canada

CONTROLS ON NEWFOUNDLAND'S EXPORTS OF SALTED FISH TERMINATED:

The Canadian Parliament, shortly before the end of its 1959 session, repealed all acts relating to the control of the export of salted fish from Newfoundland as of July 31, 1959. Exclusive rights to export salted fish (cod, haddock, hake, ling, pollock, and cusk) from Newfoundland has in the past been the privilege of Newfoundland Associated Fish Exporters Limited. Under the terms of the new act no export permits will be required to export salted fish and therefore the exclusive rights of the Newfoundland Associated Fish Exporters Limited have been terminated. Notification was given in 1958 that such exclusive rights would be terminated and the legislation was necessary to implement the decision.

The system of having exports under the control of a single corporate body was introduced many years ago in an effort to regularize marketing conditions and prevent uneconomic competition. The terms of Union of Newfoundland and Canada provided for the continuation of such exclusive export rights for five years from the date of Union and thereafter until Parliament decreed otherwise. It was decided last year that exports could not be controlled from one province while remaining uncontrolled elsewhere and notice was given for termination of the provision in 12 months.

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INCENTIVE PAYMENTS FOR BRITISH COLUMBIA DOGFISH:

The Canadian Government is again providing a financial incentive this year in an effort to control the stocks of dogfish in British Columbia waters. This was announced on July 24, 1959, by the Canadian Minister of Fisheries. He said that C\$250,000 has been earmarked to cover special payments to fishermen at the rate of 10 cents a pound for dogfish livers delivered to liver-oil plants and collecting stations in British Columbia. The program is now in effect and will continue to the limit of the funds, which will be available until March 31, 1960.

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"This year's dogfish program is a follow-up to that launched by the Federal Government on January 12 this year which terminated March 31," a statement from the Minister pointed out. "The initial effort was largely experimental to determine the most effective methods of dealing with the dogfish problem," he said.



Chile

PRODUCTION OF OIL AND MEAL BY WHALING INDUSTRY, 1956-1958:

Production of marine oils and meal in Chile is largely by the whaling industry. the latest official figures on the catch by

Species	1958 ^{1/}	1957	1956
	(Number)		
Blue whales	220	190	207
Finbacks	210	200	203
Humpbacks	-	10	3
Sperm whales	1,206	990	1,154
All others	-	120	47
Total	1,636	1,510	1,614

^{1/} Estimated.

the whaling fleet are for 1957 when 1,510 whales were taken. This is lower by 104 whales than the 1956 catch of 1,614 whales. It was estimated the catch of whales in 1958 totaled 1,636 in number, according

Product	1958 ^{1/}	1957	1956
	(Metric Tons)		
Sperm oil	4,200	4,020	4,273
Whale oil	3,600	3,480	2,754
Total oil	7,800	7,500	7,027
Meat	230	220	218
Whale meal	1,200	1,050	1,180
Bone oil ^{1/2/}	520	4,800	500

^{1/} Estimated.
^{2/} Mainly from whales, but may include bone oil from other animals.

to trade estimates. However, the yield of oil and other whale byproducts was higher in 1957 than in 1956. Production of oil from baleen whales and sperm whales during the 1956 to 1958 period showed a

steady increase from 7,027 tons in 1956 to 7,500 tons in 1957 and may have reached 7,800 tons in 1958.

Imports of whale or other marine oils into Chile are negligible. Most of the whale oil, sperm oil, and other whale by-products produced are utilized in Chile. Most of the whale oil is used in oleomargarine production. In 1957 exports of whale and sperm oil amounted to 889 metric tons and for 1958 and 1959 exports were estimated to be about 100 tons. (United States Foreign Agriculture Service Report from Santiago, April 28, 1959.)

TUNA LANDINGS, PACK, AND EXPORTS, 1957-58:

Tuna landings in Chile during 1958 amounted to 172 metric tons as compared to 487 tons in 1957. No records are kept of landings by species, but yellowfin, bluefin, and albacore tuna are found off the Chilean coast between Arica and San

Country	1958		1957	
	Jan. - June only ^{2/}		Quantity	Value
	Metric Tons	US\$	Metric Tons	US\$
United States	24	4,573	343.0	73,768
Bolivia	-	-	0.4	150
Italy	-	-	3.0	2,289

^{1/} It is estimated that nearly 95 percent of all exports were frozen tuna, and the remaining canned fish. Fresh tuna is not exported.
^{2/} Data on second half of year not available.

Antonio. It was estimated that during 1957 and 1958, 10 percent of all landings were albacore, 20 percent bluefin, and the balance yellowfin.



Fig. 1 - Typical Chilean fishermen from Quintay fishing for tuna.

The canned tuna pack for use in Chile in 1958 was only 3 tons as compared to

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28 tons in 1957. No canned tuna was produced for export in 1958, and only 8.5 tons were produced in 1957--3 tons for



Fig. 2 - Chilean fishermen bringing their catch ashore from small boats.

Bolivia, 5 tons for the United States, and 0.5 tons for Italy. (United States Embassy dispatch from Santiago, July 7, 1959.)



Ecuador

GRANT BY UNITED NATIONS FOR
FISHERIES DEVELOPMENT
UNDER STUDY BY FAO:

A five-man special mission of the Food and Agriculture Organization (FAO) arrived in Quito July 18, 1959, to make preliminary studies of the fishing industry, preparatory to a 1960 grant of US\$500,000 from the United States Special Fund. Ecuador will furnish another \$200,000, the total to be spent over a three-year period to study fish resources, establish an information center for fishermen, advise the fishing companies on modernization of methods, and help expand markets.



France

IMPORT RESTRICTIONS REMOVED
ON SALMON AND LOBSTER:

The French Government on July 23 published a consolidation of all commodities which have been freed from import restrictions since the beginning of 1959, and canned and frozen salmon and canned lobster are included. Approximately 650 items have been recently liberalized as a result of this step which raises the total number of freed commodities to about 1,500. All but some 200 of the liberalized commodities may be imported from the United States and Canada.

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INCREASE IN CANNED TUNA
CONSUMPTION SOUGHT:

A large publicity campaign for increasing canned tuna consumption will soon be launched in France under the auspices of the Chambre Syndicale of France's tuna canners.

The consumer will be approached directly by use of a mobile kitchen which will demonstrate on all the main streets of principal cities. The mobile kitchen will show the uses of canned tuna for family cooking and provide first-hand ideas on tuna cookery to homemakers. The kitchen will also distribute samples of the various tuna dishes prepared.

The efforts of the mobile kitchen will be supported by newspaper ads and radio announcements. It is hoped that the result will be increased consumption which will relieve the present crisis that exists in the French canned tuna market.

This publicity campaign is the first step towards real action and the abandonment of the use of advertising slogans which were useful at first but later failed to do a selling job because they were no longer new enough to attract attention. (*France Peche*, no. 31, July-August 1959.)



Ghana

IMPORT CONTROLS ON CANNED SALMON LIBERALIZED:

Among the commodities from the so-called "dollar area" included in a list of imported items that no longer require an import license for entry into Ghana are fresh, chilled, frozen, and canned salmon and salmon trout. But canned salmon is the only product in the category of any importance. Under Notice to Importers No. 135 effective July 3, 1959, canned salmon can now be imported into Ghana under "open general license," i.e., without a specific import license or without any dollar quota being assigned to the importing firm.

Canned salmon is a luxury item in Ghana and is sold only to the wealthy in the major cities. Now that imports of canned salmon can be imported without a license, it is doubtful that canned salmon will find a major market in Ghana because of its high price as compared with cheaper canned fish. However, the removal of import controls on canned salmon may create some interest on the part of Ghana importers. (United States Embassy in Accra, July 13, 1959.)

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U. S. DOLLAR AID FOR GHANA FISHERIES DEVELOPMENT:

The West African nation of Ghana (formerly the Gold Coast) has announced its plans for development of its fisheries. They involve plans for the establishment of two fishing ports with freezing plants and refrigerated storage. To finance these projects, it is reported that US\$2.5 million will shortly be loaned through the International Cooperation Administration and the Development Loan Fund. It is expected that realization of these plans will provide the only large-scale fishing base in West Africa. (Suisan Keizai Shim-bun, Japanese periodical, July 8, 1959.)



Greece

MARKET FOR CANNED SARDINES OR PILCHARDS:

There is no production of canned pilchards as distinguished from true sardines in Greece. The sardines which are caught in Greek waters are small and thin, and though efforts have been made to can Greek sardines in olive oil, the results a-

chieved were unsatisfactory. Greek production of canned sardines amounts to about 20 metric tons annually and is chiefly consumed by the Greek armed forces. Greek requirements of canned sardines or pilchards are met almost exclusively through imports.

Imports: Canned fish may be freely imported into Greece. Greek import statistics do not show canned pilchards separately; they come under the general classification "canned sardines," which also includes brisling and herring (*Clupea spratus* and *Clupea harengus*) and other sardine-like fish.

Table 1 - Greek Imports of Canned Sardines^{1/}, 1958

Country of Origin	Quantity	Value ^{2/}	
		Metric Tons	US\$ 1,000 Drachmas
Portugal	607	9,900	330
Netherlands	252	2,290	76
Japan	128	1,406	47
West Germany	73	1,010	34
Benelux	61	778	26
United States	49	455	15
Yugoslavia	10	143	5
Other countries	4	66	2
Total	1,184	16,048	535

^{1/}Greek import statistics do not differentiate between "sardines" and "pilchard."

^{2/}Values are c.i.f. Greek port.

^{3/}Values converted at rate of 30 drachmas equal US\$1.

From 1954 through 1958, imports of sardines or pilchards from the United States by Greece varied from 49 to 130 tons. Imports from the United States made up about 6.6 percent of the quantity and about 4.7 percent of the average value for the 1954-58 period.

Table 2 - Greek Total Imports of Sardines and Imports from the United States, 1954-58

Year	Total Imports		From United States	
	Metric Tons	US\$ 1,000	Metric Tons	US\$ 1,000
1958	1,184	535	49	15
1957	1,006	476	105	32
1956	1,491	714	59	17
1955	1,045	446	130	46
1954	1,296	492	52	15

In the total quantity of canned sardines imported into Greece, only small amounts of pilchards of California-type sardines are included. Imports of pilchards originate almost exclusively from the United States and Japan. Portugal and Yugoslavia supply the Greek market with sardines in olive oil, packed usually in 4-oz. cans. West Germany, Benelux, and the Netherlands ship to the Greek market sardine-like fish in tomato sauce packed in cans with the label "Sardines" affixed to them. Greek importers encourage their foreign suppliers to label cans containing sardine-like fish as "Sardines" for two reasons: (a) canned fish come under two Greek Tariff paragraphs (4d and 4e). Import duties and surtaxes assessed on paragraph 4d exceed those of paragraph 4e by about 20 percent. Sardines and sardine-like fish are dutiable under tariff paragraph 4e. All other canned fish, including those not specifically mentioned in the Greek Tariff, are dutiable under tariff paragraph 4d. To avoid the risk of having their import shipments of sardine-like fish subjected to the higher import duty of tariff paragraph 4d, local importers demand that their suppliers label cans as "Sardines," in which case the higher import duty will not be applied; (b) this practice enables local importers to sell canned sardine-like fish of inferior quality as sardines or pilchards at prices which United States and Japanese packers of genuine pilchards are unable to meet.

Consumption: In Greece, a country with extensive sea coasts, fresh fish appeals to people more than canned fish. However, facilities for distributing fresh fish in the interior of the country are poor and it is in these areas canned fish is consumed. Greek preference is for sardines in olive oil, which are also consumed in the large cities as an appetizer. Canned sardine-like fish as well as pilchards are eaten as a regular meal by low-income groups in the provinces. These groups account for 80-85 percent of total consumption of pil-

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chards, which is placed at about 100-120 tons annually. Inventories in late June were estimated at 25-30 tons.

The majority (95 percent) of Greek consumers prefer pilchards in tomato sauce, and the most popular can sizes are the 5-oz., 1 lb. oval, and 8-oz. oval. These sizes account for about 95 percent of total local sales, with the remainder made up of varied sizes.

Prices: Greek importers of pilchards insist that prices given by foreign packers be c.i.f. Greek port. The long distance involved in the case of shipments originating from Japan and California and the corollary high freight charges render preferable the quotation of prices on a c.i.f. or c.&f. Greek port (usually Piraeus) basis. It should be noted that only small quantities of South African pilchards enter the Greek market (9 metric tons in 1957 and nil in 1958). Table 3 gives prices on a c.i.f. Piraeus basis.

Table 3 - Prices for Sardines Delivered c.i.f. Greek Ports, January-June 1959

Country of Origin	Can	Base Unit	Price ^{1/} US\$ Per Case	Style
Japan	15-oz. oval	48 cans	8.35-8.90	Tomato
	7.5-oz. "	96 "	9.85-10.25	"
	5-oz. tall	100 "	7.80-8.20	"
United States ^{2/}	15-oz. oval	48 cans	9.35-9.55	Calif., Tomato
	15-oz. tall	48 "	7.65-7.85	" "
	15-oz. "	48 "	7.15-7.35	" Natural
Netherlands	7-oz. oval	48 cans	5.20	Tomato
	8-oz. "	48 "	5.40	"
	6-oz. tall	100 "	7.40-7.70	"
	14-oz. oval	48 "	6.60	"
South Africa	14-oz. tall	48 "	6.30	"
	5.5-oz. tall	100 cans	6.60	Tomato
	12-oz. "	48 "	6.30	Natural
	12-oz. "	48 "	6.50	Tomato

^{1/}Sardines in tomato sauce packed in oval cans of 1-lb., 8-oz., and 5-oz. account for 95 percent of sardines or sardine-like fish sales in Greece.

^{2/}United States prices are as of January 1959. Quotations in June 1959 were lower with 48 15-oz. oval tomato cans/cs. offered at \$7.00, 48 15-oz. tall tomato cans/cs. \$5.50, 48 15-oz. tall natural cans/cs. \$5.00, 100 5-oz. tall tomato cans/cs. \$6.00, f. a. s. California ports with 1.5 percent commission included.

Note: Prices are c.i.f. Greek ports unless otherwise stated and include 5-percent commission for United States and Japanese sardines and 3-percent commission for South African sardines.

Dutch packers of herring in tomato sauce ship their product to the Greek market labeled as "Sardines." The rural population, which is the principal consumer of pilchards, does not differentiate between genuine pilchards and sardine-like fish offered as "large sardines." As a result, Dutch "sardines" are readily marketable in Greece and appear to be the strongest competitors of genuine pilchards, not only because of identical packing and style, but also because of their low price.

Considering that pilchards are consumed by the poorer classes of the Greek population, price is the deciding factor. As a result, competition among foreign suppliers of canned fish in general is very strong in the Greek market. Actual practice has shown that quality is a factor of minor importance as regards the sale of pilchards in Greece.

Import Duties: In the case of Greek tariff paragraph 4e (canned sardines and sardine-like fish), 1 metallic drachma is equal to 10.80 paper drachmas. In addition to the import duty, surtaxes amounting to 75 percent of the import duty are assessed on importation. On this basis, the import duty and surtax on canned sardines, per 100 kilograms (220.4 lbs.) would be as follows:

Most Favored Nation Countries:
 Import duty - 324 paper drachmas
 Surtaxes - 243 paper drachmas
 Import duty and surtax - 567 drachmas or US\$18.90 (30 drachmas=\$1)

GATT Countries:
 Import duty - 194.40 drachmas
 Surtaxes - 145.80 drachmas
 Import duty and surtax - 340.20 drachmas or US\$11.34

A turnover (sales) tax of 1.875 percent of the wholesale price of canned pilchards, calculated on the basis of the

c.i.f. price increased by 15 percent is also levied on imports.

Terms of Payment: Under Greek regulations, importers of canned fish in general (tariff paragraphs 4d and 4e) are required to settle payment of their orders with foreign suppliers either by Letter of Credit or cash against shipping documents presented in Greece (sight draft). Time settlement or "in transit" shipments are not permitted. Importers must apply direct to an authorized commercial bank for an import approval (i.e. allocation of foreign exchange) prior to shipment. The issuance of such approvals is a routine operation, but a cash deposit is generally required before an approval is issued. This cash deposit amounts to 100 percent of the c.i.f. invoice value of the order plus 40 percent of the c.i.f. invoice value as an advance against import duties and other taxes, irrespective of the method of payment for the order. In cases of payment against sight draft the 100-percent deposit may, at the request of the importer, be transferred to the foreign supplier in total as full payment or in part as an advance remittance.

Outlook: Sales prospects for California pilchards do not appear favorable. Greek consumer preference is definitely for sardines packed in olive oil. Local importers state that sardines in olive oil can be stored for a long time without spoiling while canned pilchards in tomato sauce are more sensitive to the hot weather of the Greek summer months. Furthermore, canned pilchards are generally considered by local importers as a slow-moving item. Other factors that render canned pilchard imports an "unattractive" business are: (1) under market police regulations local importers are allowed only an 8-percent profit on canned pilchards (which is further reduced when this item is distributed through wholesalers and retailers), and (2) they are required to tie up considerable amounts of capital (140 percent of the c.i.f. invoice value) for long periods of time (in the case of shipments from United States and Japan delivery time is 2-3½ months).

California packers of pilchards are further handicapped by the fact that Dutch, Belgian, and German packers of sardine-like fish are in a position to quote lower prices and effect speedier deliveries. Local importers state that the best chance of transacting business in California pilchards is in the 5-oz. and 1-lb. oval cans packed in tomato sauce and in cases of 100 and 48, respectively, provided that: (1) more advantageous prices are quoted; (2) quotations are for delivery c.i.f. Greek port; (3) payment against sight draft is accepted; and (4) cans are labeled "California sardines." The same sources, however, point out that the aggregate of these transactions cannot exceed, at present, 500-1,000 cases.



Honduras

FISHING COOPERATIVE ESTABLISHED:

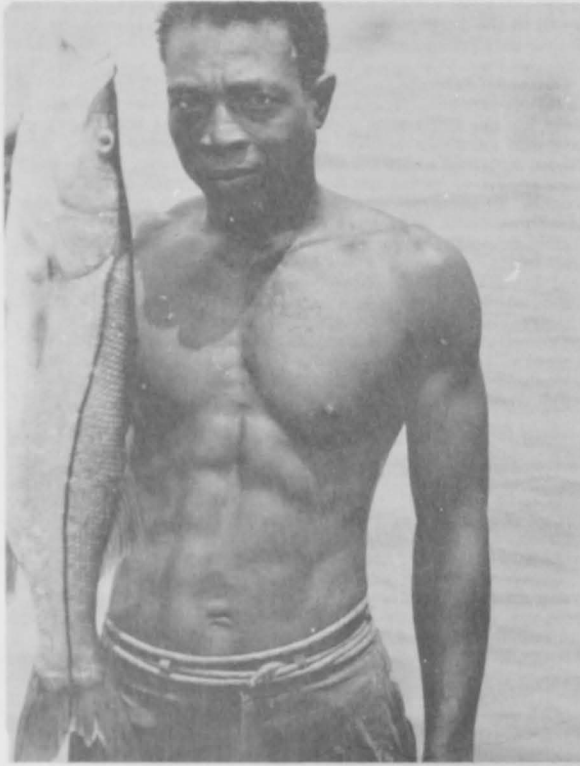
The first cooperative fishing society of Honduras was established on June 14 in the Honduran port of San Lorenzo. The cooperative was organized by all the small fishermen that operate in the area of the Gulf of Fonseca on the Pacific coast.

This cooperative is one of the immediate practical results of the new Law of Fishing recently approved by the National Congress. This Law (published in *La Gaceta*) is in full force and grants special privileges to cooperative bodies, such as, preference in fishing in zones in which are domiciled more than one-half of its members, and exemption from the

Honduras (Contd.):

guarantee deposit normally paid by all concession holders.

There are fifty members of the cooperative, but the possibility of increasing this number exists. The first commercial contract has already been made with a company which conducts its business in San Lorenzo.



Fisherman of Honduras holding a snook.

In respect to this new organization, it also should be mentioned that within the National Economic Council is a commission of experts organized for the purpose of writing additional regulations to the fishing law, the United States Embassy in Tegucigalpa reported on June 30, 1959.



Iceland

**FISHERIES TRENDS,
SECOND QUARTER, 1959:**

Iceland's total white fish catch January-May 1959 amounted to 237,152 met-

ric tons as compared to 227,706 tons for the first five months of 1958, which itself was one of the best winter seasons on record. The gloom which prevailed in fishing circles during February and most of March, when exceptionally prolonged storms limited catches, was dispelled by the fine catches in April.

A notable feature of the season was the rise in the catch of ocean perch, which usually is fished by trawlers later in the year. Largely because of the effect of the 12-mile limit, which excluded Icelandic trawlers from some of their favorite cod fishing grounds, the trawlers remained late on the Newfoundland ocean perch banks before returning for the Icelandic winter cod season. Well before the end of the season many of the trawlers had gone back to North American waters. As a result, although the trawlers caught slightly more than half the cod which they had taken during the 1958 winter season they brought in considerably more ocean perch. (Total catch of ocean perch for January-May 1959 amounted to 33,767 tons as compared to 12,202 tons for the first five months of 1958.)

While the 12-mile fisheries limit inhibited the trawler catches of cod, the motorboats benefited by the new limits. Due also to improvement in gear and increased use of nets, the motorboats caught 148,861 tons of cod during the first five months of 1959, compared to 134,485 tons during the same period last year. This gain was offset by reductions in the cod catch of Icelandic trawlers, however, so that the total landings of Iceland's most important fish species (cod) was slightly less for January-May 1959: 174,440 tons as compared to 180,015 tons in 1958.

Of the minor fish species, there were slight declines compared to last year. Flatfish landings were about 10 percent lower, and haddock amounted to 10,239 tons as compared to 12,778 tons for the five months in 1958.

It was the continued heavy catches of ocean perch in the waters north of Newfoundland which accounted for the fact that this year's total catch of all species

Iceland (Contd.):

of groundfish exceeded that of last year by 4.4 percent for the five-months period.

Catch statistics for June were not yet available, but reports indicated continued good landings by the trawlers. At the same time, there were indications that the new ocean perch grounds might be giving out. More days were required by the Icelandic trawlers to fill their holds, and some of the trawlers returned to home waters.

The main north coast herring season commenced with relatively bleak prospects. The Norwegian, Soviet, and Icelandic biologists who survey the area each year before the opening of the season met at Thorsavn in the Faroes to compare findings, and they issued a rather somber report featuring the scarcity of plankton and implying a poor season.

When fishing actually started, during the last two weeks of June, early results seemed to bear out this pessimism. The herring was much leaner than last year; by June 11 only 2,652 tons of salting quality had been caught as compared to 18,816 tons at the same time last year. The total catch at that date, 21,235 tons, was slightly below that for the same date in 1958 (23,701 tons).

But in mid-June, however, there has been a dramatic improvement. Not only has the herring appeared in greater volume, but the fat content has improved so markedly that a much higher proportion is available for salting. As of July 18, with some six weeks of the season still to go, herring catches were as follows:

	1959		1958	
		Metric Tons		Metric Tons
For: salting	86,928 bbls. 1/	11,735	181,232 bbls.	24,466
reduction	230,984 mal 1/	31,183	93,161 mal	12,577
freezing	8,991 bbls. 2/	899	5,534 bbls.	553
		43,817		37,596

1/ 298 pounds each.
2/ 220 pounds each.

Even if, as now seems quite likely, the herring catch should exceed that of last year, it is quite possible that the

foreign exchange earnings would be less, because advance sales contracts for salted herring, the most valuable form of processing, have been very disappointing. There is some consolation, however, herring used for meal and oil, although less profitable, does earn free currency, whereas the bulk of the salted herring has been sold to the clearing agreement countries of Eastern Europe.

The United States, which has purchased an increasing amount of Iceland fish as a result of poor Canadian catches, has replaced the Soviet Union as Iceland's chief customer and chief supplier, reversing the relative positions of the two countries during the same period of 1958.

In preparation for the summer herring season, the Icelandic fishing industry pressed the Government for improved terms. In the Export Fund Law of May 1958 the 80 percent export premium applicable to white fish products (resulting in an effective export exchange rate of Ikr. 29.26 to the dollar) was not extended to herring, which was considered more competitive. North coast herring was limited to a 55-percent premium (comparable to the general effective rate for tourism, shipping, etc.), while south coast herring, which was considered to be in not quite so strong a position, was given a premium of 70 percent. The herring producers, many of whom suffered losses under this system last year, demanded to be placed on a basis of equality with white fish producers, with an export premium of 80 percent. This concession actually was granted last autumn for the south and west coast herring; the north coast curers demanded parity of treatment before the opening of the 1959 summer season. Negotiations with the Government finally ended, in June, with agreement to pay a 75-percent premium on salted herring and 70 percent for herring delivered to factories for processing into meal and oil.

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REYKJAVIK CITY COUNCIL
BUYS STATE-OWNED
FISH PROCESSING PLANT:

The City Council of Reykjavik, Iceland, on behalf of the Municipal Trawler Company, has approved the purchase of

Iceland (Contd.):

the Icelandic Government-owned fish processing center. This plant was established by the Government in 1947 as a prototype for privately-owned fish processing and freezing plants.

The price, as assessed by independent appraisers, was fixed at lkr. 29,250,000 (about US\$1,799,000 at the exchange rate of 16.26 lkr. to US\$1). The Municipal Company will be faced with additional expense in expanding the capacity of the plant. It has not been decided if the present herring canning part of the center will be retained.

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SALT HERRING
MARKETING PROBLEMS ARISE:

Due to reductions in advance commitments by Russia, Finland, Sweden, and a delay in negotiating a contract with East Germany, a marketing problem for Iceland's salt herring production has arisen. As of the end of June, Russia had signed up for 40,000 barrels of north coast herring as compared with the 150,000 barrels of north and southwest coast herring purchased in 1958 and 1957. Finland, which contracted for 58,500 barrels in 1958, has signed for 50,000 barrels of north coast herring this year. Sweden has ordered 60,000 barrels this year as compared with 72,500 in 1958.

Both Russia and East Germany were reluctant to open negotiations for supplies of Icelandic herring, despite pressure by the Icelanders to bring about agreements before the herring season opened. The Russians finally agreed on June 24 to take 40,000 barrels and the East Germans agreed to open negotiations on June 28, 1959.

The trade agreement between Iceland and Russia was made in 1956 and is effective until December 31, 1959. The agreement calls for 150,000 barrels of north and southwest coast herring. The East Germans contracted for 40,000 barrels of north coast and 15,000 barrels of south coast Icelandic herring in 1958.



Iran

CONTRACTS FOR CAVIAR AND
STURGEON PRODUCTION SIGNED:

The National Iranian Fisheries Company (Shilat) has signed three contracts for the caviar and sturgeon production of the Caspian Sea for the year beginning July 24, 1959. The Shilat advertised for bids on March 21, 1959, which were opened on May 2, 1959. For the American and European markets this was the first occasion since 1956 that the caviar and sturgeon were open to award, because in that year a United States firm and a French firm for the European market secured 3-year contracts which expired on July 24 this year. The Soviet contract is negotiated on an annual basis.

Eight bids were submitted, of which one was American. While the American bidder won the major award for the American market, a British company was two months ago granted 5 metric tons for the American market and 5 tons for the European. This was said to be in line with the Shilat's idea of preventing a monopoly contract in any area. The Shilat has now agreed with the American bidder, however, to give him exclusive rights.

National Iranian Fisheries Company--Caviar and Sturgeon Contract Awards						
	United States	Soviet	British		French	
			U.S. Mkt.	Euro-pean Mkt.		
	Quantity	Prices				
	1,000 Lbs. (US\$ a Pound)				
Caviar:						
Beluga, No. 1	24.2	11.83	11.34	12.84	17.60	15.88
Beluga, No. 2	3.3	6.80	-	8.53	11.79	9.34
Asetra, No. 1	3.2	11.83	10.88	12.25	15.92	13.65
Asetra, No. 2	3.0	6.80	4.90	9.43	12.70	8.44
Sevruga, No. 1	5.9	6.35	7.14	6.40	9.43	7.26
Sevruga, No. 2	32.1	3.40	3.43	3.24	-	-
Pressed, No. 1	6.8	2.95	3.21	3.18	3.18	3.08
Pressed, No. 2	9.7	2.36	2.35	3.08	2.72	2.63
Total Caviar	88.2	-	-	-	-	-
Sturgeon	-	405.00	$\frac{1}{2}$ 320.00- $\frac{2}{2}$ 400.00	-	-	381.00

¹/Second grade (less 10 percent).
²/First grade.

The United States firm signed a contract with the Shilat on July 11, 1959, to become effective July 24, 1959, for a three-year period. The caviar and sturgeon may be marketed in any territory except Europe and the U.S.S.R. Forty metric tons of caviar are to be delivered in the first year, 50 tons the second, and 60 tons the third.

A notable aspect of the contract is the large quantity of sturgeon, 250 metric tons, to be taken annually. Only 50 tons were hitherto taken by the United States, and it is understood that there was some difficulty in selling that quantity.

The Soviet contract, signed July 11, 1959, is for one year only. It calls for 46 metric tons of caviar at prices understood to be higher than last year's by 25 percent for first grade types and 20 percent for second grade types. Of this caviar, 33 tons are to be delivered in the third quarter of 1959. In addition, the Soviets agreed to take 600 tons of sturgeon at a price of US\$320 per ton (less 10 percent) for second grade, as compared with US\$340 per ton last year.

The British company contract (controlled by a Swiss national resident in Tehran) originally called for 5 tons of caviar for the American market and 5 for the European market. The contract was signed two months ago and about 4,000 pounds for the European market have already been delivered.

It is understood that the Shilat is signing a contract with the French interests, which had the previous three-year contract for 40 tons of caviar and 50 tons of sturgeon, according to a July 14, 1959, dispatch from the United States Embassy at Tehran.

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Iran (Contd.):

**SHRIMP FISHERY TRENDS,
APRIL-JUNE 1959:**

Shrimp fishing operations in the Persian Gulf had virtually come to a halt at the end of June. The shrimp fishing company operating out of Iran had been hopeful of operating year-round, but the June trips of the two trawlers, which covered the Iranian coast from Jask to the mouth of the Shatt-Al-Arab, produced less than a ton of shrimp.

The Iranian shrimp fishing company began fishing in June 1958 and throughout the hot summer months until October their catch was negligible. The United States fishermen operating the boats are convinced that the season lasts from October through April. During the company's first year of operation approximately 285 tons of shrimp were caught with two boats in operation.

Seven 65-foot trawlers, which were scheduled to arrive on cargo vessels in late May and June, were delayed by Persian Gulf port congestion and were not scheduled to be off-loaded until mid-July. A new freezer ship to be used in conjunction with the trawlers is now being outfitted in Houston, Texas, and will arrive in the Persian Gulf in the fall. With the additional fleet, the operators expect to increase their catch considerably. (United States Consulate in Khorramshahr, June 30, 1959.)



Japan

CANNED FISHERY PRODUCTS EXPORTS, 1957-1958:

Exports of canned fish and shellfish by Japan in terms of cases in 1958 amounted to 9,198,000 actual cases, up by 23.3 percent from the 7,461,481 cases exported in 1957. The United States was Japan's only customer for canned tuna in brine, which accounted for 58 percent of all types of Japanese canned tuna exports in 1958.

Increases in Japan's exports of canned salmon or salmon trout amounted to 80.0 percent, or from 1,540,211 cases in 1957 to 2,781,363 cases in 1958. Exports of all types of canned tuna were higher by 186,000 cases in 1958, with a drop of 5.7 percent in the exports of canned tuna in oil more than offset by an increase of 16.5 percent in exports of canned tuna in brine and a 42.7-percent increase in the exports of unclassified canned tuna.

Exports of mackerel-pike or saury were up sharply (70 percent) in 1958, but sardine exports dropped by 21.4 percent in

1958 as compared with 1957. Canned shellfish other than king crab in 1958 increased to 339,732 cases from 1957 exports of 223,435 cases.

Japanese Exports of Canned Fishery Products By Country of Destination, 1958					
Canned Product	United States	Canada	Other	Total 1958	Total 1957
. Cases					
Crab (king and other)	285,501	7,502	316,407	609,510	601,393
Tuna:					
In Oil	-	184,564	1,120,501	1,305,065	1,547,854
In brine	2,031,584	-	-	2,031,584	1,744,260
Other	2,931	7,407	164,198	174,536	33,142
Total tuna	2,034,515	191,971	1,284,699	3,511,185	3,325,256
Mackerel-pike (saury)	7,963	1,044	955,808	964,815	567,811
Sardine	10,410	20	682,272	692,702	880,960
Salmon	402,962	43,232	2,335,169	2,781,363	1,540,211
Other fish	8,653	604	282,808	292,065	310,532
Shellfish	234,326	66,310	39,096	339,732	223,435
Other aquatic products	4,374	174	2,080	6,628	11,883
Total all canned products	2,988,804	310,857	5,898,339	9,198,000	7,461,481

Source: Japanese Fish Exporters Association.

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SUMMER ALBACORE FISHING ENDS WITH LANDINGS OF 10,400 TONS:

The 1959 Japanese summer albacore fishing season continued through July, about half a month longer than in normal years, but was about finished by early August. At that time there were no more boats on the fishing grounds, and only 2 or 3 due to land. Landings to the end of July were 10,400 metric tons, about 90 percent of which was bought by canners.

This year the canners were hoping to get about 16,000 tons of summer albacore, and the freezers' needs brought the total requirements to about 26,000 tons. Because of the shortage, the price went to 183 yen per kilogram (US\$461 a short ton) on June 26 at Shimizu, the highest ever recorded at that port. At such prices, the freezers have not been able to buy and the cold-storage warehouses are empty.

There was an unusually large number of boats fishing this year. About 200 boats from all over the country now operated between 50 and 500 miles east of

Japan (Contd).:

Cape Nojima during the summer albacore season. Catches per vessel did not drop after the first of July, but rather took a turn for the better. It is unusual for the number of boats fishing in July to exceed those that were out at the beginning of the season, and it is also unusual for the fishing grounds to be located so close to Japan so late in the season.

The Tokai University Fisheries Laboratory in Shimizu predicted that there would be a good possibility of large catches in early and mid-July in areas comparatively close to the coast. This prediction was supported by the fact that the majority of boats from Mie, Kagoshima, and Shizuoka prefectures had moved to grounds at 147° E. longitude and were making good catches of the smaller fish, which in normal years made up the bulk of the summer catch. Under these circumstances, the price dropped from its previous level and settled down between 145 yen and 155 yen per kilogram (\$355 and \$390 a short ton). The large 300-gross-ton bait boats from Omaezaki did not do well on summer albacore. (Nippon Suisan Shimbun, July 8, 1959.)

The current Japanese frozen albacore tuna price is US\$400 f.o.b. Japan for 20-30-pound fish. No improvement in the Japanese frozen albacore export price is expected unless United States landings are light or the price in the United States goes up (Nikkan Suisan Tsushin, August 1 and 3, 1959.)

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REPORT ON ONE EXPORT SALE OF FROZEN ALBACORE TUNA TO U. S.

Trading and negotiations by a large United States cannery have started for the purchase of mothership frozen albacore tuna produced by a large Japanese company. The first shipment, 25 tons of albacore and 150 tons of yellowfin, was shipped to the cannery of the West Coast tuna packer. The albacore base price of US\$360 a ton f.o.b. indicated that the mothership albacore export price was not as high as had been reported.

The Japanese firm plans to export 4,000 short tons of mothership-frozen albacore to the United States this year, and it is expected that almost all of this will be sold to one West Coast tuna packer. The same packer is reported also able to buy this year over 2,000 tons from another Japanese company's New Hebrides base. The concensus in Japan is that the frozen albacore price of \$360 is probably the lowest for this season. (Nikkan Suisan Tsushin, July 23, 1959.)

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ALBACORE TUNA FISHING OUT OF AMERICAN SAMOA GOOD:

Albacore tuna fishing out of the Japanese overseas base of American Samoa continues good, and the price since the first of the year has gradually risen from the low of US\$250 a ton. In July it jumped to \$310 a ton. For this reason, the Japanese vessel No. 18 Zensho Maru (158 tons), which fished en route to Samoa on a new ground east of Australia and caught about 90 tons, mostly albacore, landed a fare worth over US\$27,000, a new record for Samoa. (Suisan Keizai, July 18, 1959.)

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TUNA CATCH FOR 1958 AND ESTIMATES FOR 1959:

Landings of tuna in 1958 by fishing boats operating out of Japanese ports, out of foreign ports, and in South Pacific mothership fleets totaled 416,248 metric tons.

On the basis of the 1958 catch and examination of the prospects in several of the fisheries this year, estimates of the 1959 catch are (in metric tons): yellowfin 120,000, skipjack 150,000, bluefin 30,000, big-eyed 70,000, and albacore 45,000; total 415,000 tons.

Area of Landing	Species			Total
	Yellowfin	Albacore	Big-eyed	
 (Metric Tons)			
Japan	76,735	46,327	70,048	1/361,590
Samoa	1,966	8,169	432	10,567
New Hebrides	1,020	2,593	135	3,748
Italy	11,478	115	109	11,702
Brazil	6,033	1,119	210	2/ 7,396
Cuba	1,575	91	22	1,688
Trinidad	1,984	24	28	2,036
Panama	3,483	394	18	3,895
Haiti	2,384	219	47	2,650
Argentina	5	28	-	33
Israel	210	2	19	231
Motherships	4,657	4,096	1,911	3/10,710
Totals	111,530	63,177	72,979	4/416,248

1/Includes skipjack (147,388 tons) and bluefin (21,092 tons).
 2/Includes bluefin (34 tons).
 3/Includes skipjack (42 tons) and bluefin (4 tons).
 4/Includes skipjack (147,430 tons) and bluefin (21,130 tons).
 Source: Japanese Fishery Agency.

Japan (Contd.):

Total fishing power is increasing gradually, as there is considerable new construction of larger and more efficient boats. The dispatching of many of the biggest tuna boats to the rich Atlantic grounds should result in a considerable increase in the yellowfin catch, although yellowfin landings in Japanese ports may be expected to decline somewhat. The Atlantic yellowfin catch will depend to a large extent on the strength of the United States cannery demand, the progress toward solution of quality problems in Atlantic yellowfin, and the opening up of additional markets in Europe, Africa, and South America. The homeland landings of albacore will be very poor, possibly less than half of last year's. The big question here is the extent to which this decline can be made up by increased effort in other areas. With respect to both yellowfin and albacore, the biggest unknown factor is the mothership fleet fishery in the South Pacific. There are plans for two additional fleets to operate this year, but the Government has not yet decided whether to permit these operations. In view of the short albacore supply, it seems reasonable to expect that such additional fleet operations might be permitted on condition that they concentrate on albacore production. There is also a possibility that revision of production quota allocations might be made to allow greater production of albacore by clippers fishing the Atlantic.

The bluefin catch looked better in the early months of this year than last year, but the landings are rather evenly distributed over a large part of the year, and it is hard to predict what the total landings may be. The species is not a factor in the export trade anyway. The abundance of big-eyed tuna usually follows that of albacore, and therefore the catch from near grounds may be expected to drop; however, good big-eyed fishing can be found by sending vessels to the central and eastern Pacific, and with the increasing demand for sausage material it seems likely that most of any decline in the western Pacific catch may be made up by operations in more distant grounds.

The skipjack catch may well be badly underestimated. Last year's landings of this species were the greatest in recent years, but this year skipjack appear to be at least equally abundant, and the scarcity of albacore in the summer season has diverted additional fishing effort to skipjack, according to a July 10, 1959, dispatch from the United States Embassy at Tokyo.

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CATCH OF TWO TUNA MOTHERSHIP FLEETS EXCEEDS 4,700 METRIC TONS:

The Japanese tuna mothership No. 3 Tenyo Maru had as of July 27 received from her catcher boats 2,544 metric tons of fish, from which 2,282 tons of products were processed and most of which consisted of: round yellowfin 650 tons, round albacore 818 tons, yellowfin fillets 75 tons, other round and filleted tunas 213 tons, and round and filleted spearfishes 211 tons.

A second tuna mothership, Nojima Maru, had taken aboard as of July 25 a total of 2,212 metric tons of fish, from which the following was produced: round albacore 252 tons, round yellowfin 344 tons, yellowfin fillet 386 tons, filleted and round spearfishes 168 tons. (Nikkan Suisan Tsushin, July 31, 1959.)

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EXPORT PRICES OF FROZEN YELLOWFIN TUNA INCREASED:

According to Japanese press reports, the Japan Frozen Food Exporters' Association on July 2, 1959, decided to raise the basic price of frozen yellowfin tuna for export to the United States by US\$25 a short ton, effective July 3.

The new tuna export prices have the status of unofficial minimum or check prices, to be enforced by agreement among members of the exporters' association. The official check prices, which are enforced by the Ministry of International Trade and Industry, remain unchanged. Under the official schedule, the basic price, that for gilled and gutted 20- to 80-pound yellowfin tuna f.o.b. Japan, is still \$220 a short ton. From this base price, various differentials are figured for other sizes of fish or for fish in other stages of preparation, as well as for transshipment exports through foreign ports.

Under the Association's new export price schedule, 20- to 80-pound yellowfin gilled and gutted will be sold at not less than \$245 a short ton f.o.b. Japan. Yellowfin 80-100 pounds will be \$235 and fish over 100 pounds will be \$215. The unofficial f.o.b. Tokyo check price for fillets will be \$235 and for dressed (i.e., beheaded) tuna, \$215. Gilled and gutted fish of 20-100 pounds transhipped through Cristobal and Trinidad will be \$230 f.o.b. with dressed fish over 90 pounds \$215, and fillets \$230. Tuna delivered at Ponce, Puerto Rico, will be subject to c. and f. check prices of \$275 for gilled and gutted 20- to 100-pound fish, \$260 for dressed fish over 90 pounds, and \$275 for fillets.

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TUNA EXPORT REGULATION COUNCIL CONSIDERS EXPORT PROBLEMS:

On July 30, 1959, the President of the Japan Federation of Tuna Fishery Associations, the Chairman of the Export Tuna Freezers' Association, the Managing Director of the Export Tuna Cannery Association, and others met with the Director of the Japanese Fisheries Agency to discuss tuna export problems, and particularly the inter-governmental negotiations proposed by United States

Japan (Contd.):

Secretary of the Interior Seaton, and to formerly initiate the activities of the new Tuna Export Regulation Council.

The Council discussed problem points and considered solutions in three areas: (1) adjustment of export volume and prices; (2) coordination of frozen tuna and canned tuna exports; and (3) other important matters related to tuna exports and the development of the tuna industry.

The Council will be composed of the presidents and managing directors of the three organizations, and for the time being the Council will hold regular meetings once a month. Special meetings will be held whenever one of the members or the Japanese Fisheries Agency requests consideration of a special problem. Administrative work for the Council will be handled by the Fisheries Agency.

Top officials of the Japanese Fisheries Agency explained to the tuna industry leaders assembled the content of the conversation between U. S. Interior Secretary Seaton and Japan's Agriculture Minister Fukuda and their thinking with regard to it. First of all, they wish to hear from the United States Embassy concerning the subjects for discussion at the proposed tuna conference, and if, after detailed examination, they consider that there is a necessity for the negotiations, they are inclined to accept Secretary Seaton's proposal and take part in such a conference. (Nikkan Suisan Tsushin, July 31, 1959.)

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TUNA LOIN EXPORTS, APRIL-JUNE 1959:

Japanese exports of tuna loins to the United States during April-June this year amounted to 800 short tons, according to Japan Frozen Food Exporters Association. The total consisted of albacore loins 277 tons, and yellowfin loins 523 tons. Because of very light albacore catches, the export price of albacore loins rose substantially. At the opening of the business year on April 1, the official export check price was US\$730 a

ton f.o.b Japan. The price then gradually rose until it reached around \$860 at the end of June.

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DIRECT FROZEN TUNA EXPORTS FROM ATLANTIC FISHERY TO EUROPE INCREASE:

Japanese direct exports of frozen Atlantic-caught tuna to European countries other than Italy, which began this year, had reached 2,626 metric tons by the end of June 1959.

To Yugoslavia: 435 tons on January 26 from the No. 12 Zenko Maru; 250 tons on April 2 from the No. 10 Kotoshiro Maru; 440 tons on April 15 from the Kinryu Maru; 275 tons on April 26 from the No. 26 Hoko Maru; 200 tons on May 30 from the No. 31 Hoko Maru; 310 tons on June 15 from the No. 2 Koyo Maru; total 1,910 tons.

To France: 176 tons on June 2 from the No. 1 Zenko Maru; 350 tons on June 10 from the No. 18 Symiyoshi Maru; total 526 tons.

To Greece: 190 tons on March 23 from the No. 1 Zenko Maru. (Nikkan Suisan Tsushin, July 9, 1959.)

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ASSOCIATION TO STUDY CAUSES OF "GREEN COLOR" ATLANTIC YELLOWFIN TUNA:

Percentage of rejects at California canneries of frozen Atlantic yellowfin tuna caught and delivered by Japanese has been quite high this year. Therefore, the Japan Export Frozen Fishery Products Inspection Association early in July asked the cooperation of operators of Japanese tuna vessels in the Atlantic in investigating the causes of the "green color" of some tuna after they are cooked for canning. The purpose is to improve the product and cut down on the rejects because of "green color."

Owners of vessels engaged in the Atlantic tuna fishery have been sent forms on which details of fish-handling and processing aboard the vessel are to be recorded. At the conclusion of each trip

Japan (Contd.):

at Cristobal or a European port, the captain will forward the report form for the cruise to the Inspection Association representative in Long Beach, Calif., or Venice, Italy. The Association will study the form on each lot of tuna and will make a detailed report through the exporting company to the vessel operator. Periodic reports of over-all findings will also be published. (Suisan Keizai Shim-bun, July 9, 1959.)

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TUNA VESSELS REPORT GOOD FISHING OFF NEW ZEALAND:

According to reports received at the Japanese port of Shimizu, the fishing off New Zealand for Australian bluefin tuna is quite good this year. The Japanese vessels No. 7 and No. 8 Myojo Marus, of Omaezaki Port, have been making catches of 7 to 12 metric tons a day in the area around 38° S. 160° E. It is also reported, however, that the trade winds are strong in that area and that fishing is extremely difficult.

Nevertheless, it was expected that most of the large vessels sailing south in July would go to the New Zealand grounds. The No. 18 Kaikei Maru sailed for those grounds from Omaezaki on July 2 taking along cold-weather gear, for the air temperature in the area is 57°-59° F. (Nippon Suisan Shim-bun, July 8, 1959.)

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SHIPYARD DESIGNS MORE EFFICIENT TUNA LONG-LINER:

A Japanese shipyard has completed the design of a new type of tuna long-liner that will carry over 10 percent more fish than previous types of the same size. Among the reasons why the shipyard undertook this study is the fact that, with the prospects of excess salmon fishermen coming into the tuna fisheries as a result of reorganization of the North Pacific fishery, the price per ton for tuna boat construction rights has risen very high. For this reason prospective builders are seeking designs that give a high carrying capacity in proportion to gross tonnage.

The design is for a 250-gross-ton vessel that is said to have a carrying capacity equal to a 300-ton vessel. Hitherto 250-ton boats have carried only 148 to 152 short tons, but the new design is expected to carry about 168 short tons. It will have a daily freezing capacity of 8 tons, as compared with the 3 tons usual on boats of this tonnage. (Nikkan Suisan Tsushin, July 8, 1959.)

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BUILD MORE TUNA LONG-LINERS:

A Japanese fishing company recently purchased from another Japanese firm the 700-gross-ton 1,200-hp. tuna vessel No. 10 Seisho Maru for 120 million yen (US\$336,000). The company is further planning to build two new tuna boats of 480 tons gross, for which it has already collected most of the tonnage rights. Construction will start on the first vessel this autumn.

On July 30, 1959, the Japanese Fisheries Agency published announcements of the granting of 23 fishing boat construction permits, among them a 679-gross-ton tuna long-liner (Eikyu Maru) for another fishery firm. Building of the Eikyu Maru, equipped with 1,300 hp., was scheduled to start August 1, and completion was expected in November. It will cost about 210 million yen (US\$588,000). (Nikkan Suisan Tsushin, August 1, 1959.)

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TUNA FISHERY NOTES:

With the development of the Atlantic tuna grounds, Japan's large tuna long-liners are exporting Atlantic tuna to the United States and Europe. A large Japanese fishing company is pushing plans to establish a tuna fishing base in Liberia, on the African west coast. The prospective location is either Monrovia or Sila.

The two Japanese fishing companies catching tuna for the American Samoa tuna cannery and the United States fish canner operating the Samoa cannery have agreed to raise the ex-vessel price of albacore tuna delivered to Samoa to \$275 a ton as of June 1, 1959.

The ex-vessel price of Atlantic-caught yellowfin tuna delivered by Japanese

Japan (Contd.):

long-liners to Yugoslavia in June was \$285 a metric ton--\$3-\$4 cheaper than earlier this year.

Miura City, Japan, in which the port of Misaki is located, has determined the leading tuna long-liners of 1958 in terms of value of catch landed. Vessels over 350 tons gross: No. 15 Marutaka Maru, 86,187,343 yen (US\$239,400); Chosei Maru, 66,378,939 yen (US\$184,400); Nachi Maru, 63,183,420 yen (\$175,000). Vessels of 200 to 350 gross tons: No. 10 Koyo Maru, 58,247,356 yen (\$161,800); No. 18 Koyo Maru, 56,563,025 yen (\$157,100); No. 11 Kompira Maru, 55,750,973 yen (\$154,900). Vessels under 200 tons gross: No. 11 Hakko Maru, 48,552,031 yen (\$134,900); No. 2 Chidori Maru, 38,490,233 (\$106,900); No. 6 Sumiyoshi Maru, 36,748,654 yen (\$102,100).

CANNED SALMON 1959 PACK ALMOST SAME AS LAST YEAR:

All of the Japanese North Pacific salmon factoryship fleets ended operations on July 26. The 1959 pack of canned salmon by the mothership factoryship fleets and the land pack combined totaled 2,180,000 cases as compared to 2,213,000 cases in 1958.

The drop in the pack of silvers was natural because operations ended 15

Table 1 - Japanese Canned Salmon Pack by Species, 1958-59

Species	1959	1958
	(Cases)	
Red	500,000	666,000
Silver	80,000	193,000
Pink	1,250,000	924,000
Chum	300,000	375,000
Tidbits	50,000	55,000
Total	2,180,000	2,213,000

days earlier than last year, but pink production was far above expectations because of heavy catches after the middle of July. Around the first of July it was expected that chum production might reach 400,000-500,000 cases, but catches were unexpectedly small toward the end of the season. The red catch was about as expected.

Although the total catch limit within the Japan-Soviet Treaty area was cut by 25,000 tons this year, the production of canned salmon was not much different from that of last year. With canned salmon prices up and sales going well, the operating companies cut back their production of frozen and salted salmon and canned the fish instead. Also there was a considerable increase in the catch by Hokkaido-based boats operating south of the Japanese-Soviet treaty line and consequently the Hokkaido canned salmon pack was better this year than last.

Of this year's estimated salmon pack, 50,000 cases of pinks and 150,000 cases of chums are slated for the domestic market, so it is anticipated that somewhat less than 2 million cases will be consigned to the joint sales company for export (last year 2,002,000 cases were consigned). (Nikkan Suisan Tsushin, August 1, 1959.)

The last of the 16 salmon canneryships returned from the North Pacific fishing grounds to Hakodate on August 5, ending a high-seas salmon fishing season which had started out under a gloomy threat of financial losses to all hands but which finished on a cheerfully profitable note. Because of the long drawn out negotiations with the U.S.S.R. over this year's catch quota, the fleets began fishing ten days later than they did last year, but because of good catches and favorable weather filled their catch quotas by July 27, 14 days earlier than last year. The economies resulting from this short operation and the 10-percent higher canned salmon prices this year, are considered to have made the season a profitable one for all participants.

The Japan-Soviet Fisheries Commission set the total Japanese salmon catch quota for 1959 in waters north of 45° N. latitude at 85,000 tons, a reduction of 25,000 tons from last year. Of this quota, 70,834 tons were allocated to the high-seas factoryship fleets. Preliminary reports indicate that the actual catch was about 70,650 tons, with the following composition by species: red salmon, 15,400; pink salmon, 27,000; chum salmon, 24,400; silvers, 3,600; chinook, 200. Red salmon were under a special catch limit of 16,000 tons.

Japan (Contd.):

Surprisingly, the over-all Japanese canned salmon production this year is reported to be only slightly below that of last year, in spite of the 25,000-ton reduction of the catch quota within the Japan-Soviet treaty area.

Returning fishermen reported that Soviet patrol activities on the fishing grounds were even more intensive than last year, with two or three inspections of each mothership and visits of Soviet inspectors to several fishing boats of each fleet. Stepped-up Japanese patrols to prevent violations of treaty regulations apparently kept incidents to a minimum.

A special feature of this year's salmon fishing was a concerted effort by the Japanese to establish the degree of predation on salmon by sharks. There has been no report as yet of the findings of a vessel despatched especially for this purpose, but it is claimed that of the 100 to 500 sharks examined aboard each mothership, about 80 percent contained salmon.

The catch per mothership as of July 20, 1959, was 4,063.6 tons as compared with 4,153.8 tons as of the same date in 1958. The average per catcher was 141.3 for this season as compared to 144.5 tons for the 1958 season.

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NORTH PACIFIC SALMON
FACTORYSHIP COMPANIES
BENEFIT FROM SHORT SEASON:

This year's Japanese North Pacific factoryship-mothership salmon fishing has gone very smoothly. The last of 16 factoryships was scheduled to return to Hakodate on August 6, 1959. On the fishing grounds of the Aleutian area the fleets filled their catch quotas by July 27, 14 days ahead of the August 10 closing date set under the Japan-Soviet fisheries treaty, and as a result the financial losses that were feared before the season started have been avoided and all of the operating companies are considered to have profited.

This year's Japanese fishery negotiations with the U.S.S.R. resulted in a broad cut of the salmon catch quota within the treaty area to 85,000 metric tons from last year's 110,000 tons. Out of the total quota the mothership fleets were allotted 70,834 tons. According to the mothership operators, when fishing ended on July 27 about 70,650 tons of the quota had been taken, but it is considered that exact fulfillment of the quota is technically difficult.

The salmon species composition of the catch by the factoryship fleets was: reds (which were under a special voluntary limitation of 16,000 tons), 15,400 tons; pinks, 27,000 tons, or more than 30 percent of the total; chums, about 24,400 tons; silvers, 3,600 tons; and kings, 200 tons.

The main reasons for the early fulfillment of the quota (which was barely filled by August 10 last year) were: (1) This was a peak year in the pink salmon cycle, and the fish were large. Especially heavy concentrations of pinks were encountered late in July off the southern tip of Kamchatka. (2) In most years about 10 days of fishing are lost because of bad weather, but this year the weather was fine and operations were almost uninterrupted. As a result labor costs, fuel cost, and other expenses for the motherships were less than expected, while the export prices for canned salmon are up about 10 percent. Furthermore, salted salmon is selling at a high price on the domestic market, so overall money receipts are beyond early expectations. (Asahi Shimbun, August 4, 1959.)

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SALMON STUDY TEAM
TO VISIT KAMCHATKA:

On August 3, 1959, the Japanese Fishery Agency announced that the Soviet Government had assented to a Japanese request to send a team to study salmon resources in Russia. At the 1959 Japan-Soviet fishery negotiations both sides agreed to exchange groups of experts for this purpose. Late in June the Japanese made their request, which has now

Japan (Contd.):

been answered. The Soviets are also expected to submit a specific request to Japan shortly.

The Japanese team will be headed by Professor Hiroaki Aikawa of the Kyushu University Faculty of Agriculture and will include Yoshimi Hirano of the Herring Section of the Hokkaido Regional Fisheries Laboratory, Tojiro Shinada, chief of Nichiro Fishing Company's North Pacific Division, and Jiro Imai of the Foreign Ministry. Their plan is to study salmon resources and fishing operations for three weeks, beginning August 10, at Ust-Bolsheretsk and Ozernovski in western Kamchatka. They sailed from Hakodate for Nakhodka on August 9 aboard the Fishery Agency patrol craft No. 15 Konan Maru. (Nihon Keizai Shimbun, August 4, 1959.)

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FISHING INDUSTRY ENJOYING A "QUIET BOOM:"

As of August 1959 both large and medium-size Japanese fishery enterprises were enjoying an unexpected prosperity. Because of publicity about the difficult Japan-Soviet fishery negotiations, worsening of the problems between Japan and the Chinese Communists and Koreans, and uncertainty about the form which Antarctic whaling operations will take, this prosperity has not been reflected in any marked rise in value of fishery companies' securities, but in general, all company's sales have increased at a rapid rate since spring and their business is in good shape, so that the situation can be characterized as a "quiet boom."

The following may be cited as some of the causes of this prosperity. Last year's Antarctic baleen whale oil sold on the average for export at 73,532 yen (US\$204) per metric ton, while the price for domestic sales was 85,000 yen (US\$236) for an over-all average of 74,258 yen (US\$206) per ton. This year the export price was 71,997 yen (US\$200) and the domestic price 78,000 yen (US\$217) for an average of 72,778 yen (US\$202). But this year storage costs were less, so the

price for baleen oil can be considered about the same as last year's. For sperm oil last year's average export price was 64,389 yen (US\$176) per ton and the domestic price was 75,000 yen (US\$208) for an average of 67,554 yen (US\$188) per ton. This year the over-all average sperm oil price was 57,000 yen (US\$158), a considerable drop from last year. But whale meat has sold unexpectedly well, stocks are low, and the price is about 15 percent above last year's. Furthermore, this year's coastal whaling has been extremely good.

In the salmon fishery, despite the cut in the catch quota, total production is at about the same level as last year because of good fishing south of the Japan-Soviet treaty area. Mothership fleet operations took 30 days less than last year, the price of canned salmon is 12 percent higher than last year, and frozen and salted salmon, because of short supplies, are also about 10 percent higher than last year.

Tuna prices are not much different from last year's, but the East China Sea trawl fishery had a record catch of shrimp, and the prices of mackerel-like fishes were generally up. Sales of frozen products and sausages continued strong and are expected to top last year by about 20 percent. All of these favorable factors combined have brought good sales to all companies, and the hard times that were anticipated at the end of the Antarctic whaling season and after the Japan-Soviet fishery conference have completely failed to materialize. (Nikkan Suisan Tsushin, August 1, 1959.)

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Japanese North Pacific King Crab Factoryship Pack as of July 10, 1959		
	Okhotsk (4 fleets)	Bristol Bay (1 fleet)
	(Cs. of 48 half-pound cans)	
July 1-10 pack	17,228	1,962
Total pack to July 10	216,903	70,000
1958 pack to July 10	188,565	1/59,850
Target pack	280,000	73,500
1/ Final on June 30.		
Note: Data from Japanese Fisheries Agency as given in newspaper <u>Hokkai Suisan</u> for July 18.		

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Japan (Contd.):

KING CRAB PACK QUOTA IN BERING SEA FILLED:

The Japanese king crab factoryship fleet operating in the Bering Sea has canned its quota of king crab meat for this season, the Fisheries Agency announced early in August. The target pack established for the one fleet in the Bering Sea was 73,500 cases (48 6½ oz. cans). As of July 10, it had been reported that 70,000 cases had been packed. Last year the one fleet in the Bering Sea packed only 59,850 cases.

There are also 4 factoryship fleets operating in the Okhotsk Sea for king crab and the canned pack target for this season for those fleets is 280,000 cases. As of July 10, a total of 216,903 cases had been packed by those fleets.

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CANNED-FISH PET FOOD INDUSTRY:

Japanese exports of canned pet food (with fish as the principal ingredient) to the United States were expected to expand greatly this year. Shipments for the first half of 1959 totaled approximately 200,000 cases. About 80 percent of the canned pet food is made from skipjack. In July 1959 prices per case averaged 950 yen (US\$2.64) f.o.b. Japan with not much fluctuation. Packers are concentrated in Shizuoka and northeastern Honshu, and they make the pet food as a byproduct to the canning of tuna. Although the packer's margin is slim, there is considerable interest in the business because of poor sales of canned flavored flake tuna in the Japanese market.

By far the greater part of the sales are direct to United States packers, although there is some selling of Japanese packers' brands. Beginning around February and March of this year, there was a conspicuous increase in sales by trading companies direct to supermarkets, and this has upset the market in the United States. According to the Japanese traders, the wholesale price in the United States, which was around \$5.50 a case in the fall of 1958, had dropped to \$4.50 in July 1959.

Canned fish pet food was first developed in Japan by a firm in Shimizu three years ago, and now nearly 40 firms in Shizuoka Prefecture are using fish to make canned pet food.

Shizuoka fish canners pack white meat and light meat canned tuna from albacore and skipjack and thereby earn for Japan about 10 billion yen worth of dollars (US\$27.8 million) every year. The scraps and dark meat waste are packed as flakes for the domestic market. However, canning the tuna waste as pet food seems to be more remunerative and now about 60 percent of the tuna flake material is packed as pet food.

The canned pet food is packed in No. 2 tuna cans. The contents of the cans are less than for flakes for human consumption, there is no need to add soy sauce, and when skipjack is used as raw material the manufacture of pet food is about 20 percent more profitable than the manufacture of tuna flakes. Furthermore, whether the ultimate consumer is a cat or a human being, as an export product the canned pet food enjoys tax exemption and a rebate on the cost of the cans. This year's production in Shizuoka Prefecture will be about 600,000 cases, worth 600 million yen (US\$1.7 million), and a United States importer who recently visited Shimizu stated that pet food orders could easily reach 1 million cases annually.

About a year ago a Tokyo pet dealer had the idea of introducing canned food for cats and dogs in that city, but in Japan the cats and dogs, like their masters, subsist mainly on rice, and they showed little interest in canned food, so the business did not prosper. Greater care is to be taken in the packing of canned pet food for export to the United States than is done in the case of canned fish for human consumption in Japan. (Nikkan Suisan Tsushin, July 26 and 31, 1959.)

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CANNED PET FOOD EXPORTS TO UNITED STATES CONTINUE AT HIGH RATE:

Japanese exports to the United States of canned pet food or animal food (with

Japan (Contd.):

fish as one of the principal ingredients) continued at a high rate, Shimizu area reports indicate. In June this year 33,730 cases were exported to the United States, substantially exceeding the expected exports of 30,000 cases. If exports continue at this rate, it is expected that 1959 exports will amount to 300,000 cases as compared with 200,000 cases in 1958. The current f.o.b. Japan price is reported at \$2.90 a case. (Industrial News, July 23, 1959.)

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ADDITIONAL BERING SEA
FISH-MEAL FACTORYSHIP
TO BE LICENSED:

Domestic and foreign demand for fish meal as an additive to feed for domestic animals has recently been on the increase, and a number of large fishing companies in Japan have made application for permits to engage in factoryship operations in the Bering Sea. The Japanese Fisheries Agency is expected shortly to license some additional fleets.

At present two companies are each operating one fleet, with a total annual meal production (principally from flatfish) of 18,000 tons planned. If the Fisheries Agency issues licenses, next year there are expected to be three additional fleets. Each fleet would have a planned production of 8,000-10,000 metric tons.

According to the Fishery Agency's investigations, the annual world demand for fish meal is about 1.3 million tons, and the supply is about 200,000 tons short of that amount. In the case of Japan, almost all of the production is exported, and recently there arose a shortage to meet domestic demand. Therefore the Government is inclined to license additional production on the grounds that it is not likely to push the price down from the present level.

The question of conservation of the resource is a delicate one and the Fisheries Agency has stated that beginning this year full-scale studies will be started on the resources which supply the

raw material for fish meal. (Nihon Keizai Shimbun, August 4, 1959.)

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FISH MEAL PLANT
ORDERED FOR BERING
SEA FACTORYSHIP OPERATION:

A Japanese fishing company recently ordered a fish-meal plant from Germany for its planned fish-meal factoryship operations in the Bering Sea next year. Importation of this plant will require 90 million yen (US\$250,000) in foreign exchange, of which the Japanese firm paid down 27 million yen (US\$75,000) when the order was placed. Importation and assembly of the plant in Japan will cost another 60 million yen (US\$167,000), bringing the whole cost to 150 million yen (US\$417,000). The plant, which will process 500 tons of fish a day, is scheduled to reach Yokohama from Hamburg around the middle of next March. (Nikkan Suisan Tsushin, August 1, 1959.)

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PACK QUOTA FOR
CANNED MACKEREL-PIKE
BY STYLE AND CAN SIZE:

The Japanese Export Canned Saury Producers' Association met July 21 and decided on the pack quota for canned saury or mackerel-pike by style of pack and can size for the 1959 production year (August-July 1960). It is planned to pack 60,000 cases of 4 dozen No. 4 cans in tomato sauce; 275,000 cases of tall No. 1 cans in brine; and 325,000 cases of 4 dozen No. 4 cans in brine; a total of 660,000 cases. Because inventories of old merchandise are excessive and sales are slow, it was decided not to produce any oval No. 1 cans, oval No. 3 cans, or tall No. 1 cans in tomato sauce, which have been the principal pack categories in the past. Selling prices will remain unchanged, but because the market conditions are unstable, the market development assessment (a fund for taking care of price fluctuations) was raised to 100 yen (about 28 U. S. cents) a case, double last year's assessment, so the packer's actual receipts will be lowered on the average by about 50 yen (14 U. S. cents) a case.

Japan (Contd.):

Plans for export sales in the 1959 export year are as follows (in cases): Egypt 170,000, Burma 150,000, Singapore and Malaya 48,000, Ceylon 175,000, New Guinea 110,000, West Africa 55,000, Philippines 252,000, other countries 45,000. Old stocks carried over from last year's total 360,000 cases; new production will be 660,000 cases. (Nikkan Suisan Tsushin, July 22, 1959.)

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JAPANESE FIRM TO EXPLORE FOR SHRIMP OFF MEXICAN WEST COAST:

A Japanese trading firm has entered into an agreement with a Mexican firm to explore for shrimp off the Mexican west coast. The Japanese No. 16 Myojin Maru (150 tons) and the No. 8 Hajime Maru (135 tons) were scheduled to sail for Mexico on August 10, 1959. Skilled personnel (7 men) from the Shimonoseki office of a Japanese fishing company were due to accompany the expedition. The Japanese company intends to enter the shrimp fishery, if its fishing ground surveys show that the enterprise looks promising. However, the company does not appear to be taking a very optimistic view until the results of exploration are known. (Nikkan Suisan Tsushin, July 23, 1959.)

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SHRIMP LANDINGS AND FOREIGN TRADE, 1954-1958:

Landings of shrimp in Japan in 1958 totaled 55,463 metric tons, or about 9 percent higher than the average landings of 50,273 tons for the 1954-1958 period. However, both exports and imports have increased sharply during the five

and 1957 the United States imported about 95 percent of the Japanese exports of frozen shrimp.

	Fresh or Frozen	Dried or Salted	Canned	Total
..... (1,000 Lbs.)				
Exports:				
1958:				
All Exports	3,484	904	42	4,430
To U. S.	2,682	233	12	2,927
1957:				
All Exports	2,630	949	39	3,618
To U. S.	2,525	190	31	2,746
1956:				
All Exports	2,417	1,006	59	3,482
To U. S.	2,368	219	31	2,618
1955:				
All Exports	865	1,031	1/	1,896
To U. S.	827	118	1/	945
1954:				
All Exports	289	1,387	1/	1,676
To U. S.	269	99	1/	368
Imports 3/:				
1958	4,159	53	2/	4,212
1957	3,269	131	2/	3,400
1956	45	1	1/	46
1955	-	132	1/	132
1954	69	-	1/	69

1/Not classified separately before 1956.
2/Less than 1,000 pounds.
3/Not classified as to country of origin.

The United States is also an important customer for Japanese dried or salted shrimp. United States imports of this product from Japan ranged from a low of 99 tons in 1954 to a high of 233 tons in 1958.



Libya

FISHERIES TRENDS, APRIL-JUNE 1959:

Tuna: In the Tripolitania area of Libya, the tuna-fishing season began under very inauspicious circumstances. By mid-April only 6 of the 10 companies engaged in this industry in 1958 were able or willing to resume operations. Most of the other firms found themselves unable to compete as increased production costs (mainly due to new labor and social insurance laws) compelled them to cease activities. At least one of the active companies had labor troubles when its fishermen went on strike, but the company's threat to close down completely soon resulted in a compromise.

It was unfortunate that four of the tuna processing firms ceased operations, because the tuna catch surpassed expectations. During the May-to-early-June period the companies operated off the western Tripolitania coast and although

Table 1 - Japanese Landings of Spiny Lobster and Shrimp, 1954-1958

Product	1958	1957	1956	1955	1954
..... (Metric Tons)					
Spiny lobster	1,212	1,158	1,020	1,237	1,346
Shrimp:					
"Kuruma" prawn	2,784	2,051	2,306	2,561	2,355
Other shrimp	52,679	45,427	47,917	44,700	48,585
Total shrimp	55,463	47,478	50,223	47,261	50,940

years between 1954 and 1958. Exports of fresh and frozen shrimp were up elevenfold (from 289 tons to 3,484 tons) from 1954 to 1958. Imports increased from 69 tons to 4,159 tons in the same period.

The United States was Japan's principal customer for frozen shrimp and in 1958 imported 77.0 percent (2,682 tons) of the total Japanese exports of 3,484 tons. Between 1954

Libya (Contd.):

the season was not over, they had caught about 12,000 tuna, weighing approximately 1,200 metric tons. Since mid-June the fishing has been concentrated off the eastern shores of the Province and the catch continued better than average.

Sponges: The sponge fishing season in Tripolitania continued on at a very low level as the Greek fishing fleet did not begin to make its annual appearance until the very end of the period. Only five Libyan firms were engaged in sponge fishing this year. By mid-June their combined catch totaled no more than 1,500 kilos (3,306 pounds). It was expected, however, that the arrival of the Greek vessels (about 60 were expected) would result in much greater production as they operate in deep water where the quantity of sponges obtained is much greater and the quality higher than those secured just offshore by the local firms.

In Cyrenaica the sponge fishing industry, once one of the principal industries of the Province, was virtually dead as far as the 1959 season was concerned. Unwilling to meet the terms of the Cyrenaica sponge monopoly (LE500, or about US\$1,400 a license, 40 licenses minimum), Greek sponge fishermen lost interest in this fishery, at least for the present season. (United States Embassy dispatch from Tripoli, July 14, 1959.)

**Malaya****JOINT JAPANESE-MALAYAN TUNA FISHING COMPANY FORMED:**

Negotiations for the establishment of a joint tuna fishing enterprise by a large Japanese fishing company and a Malayan marine products company have been completed and papers were signed on July 6, 1959, at Penang. The new company is capitalized at 500,000 Malayan dollars (US\$164,000), of which the Japanese side has put up 49 percent.

Operations will be started shortly with five 150-ton tuna boats. (Suisan Keizai Shimbun, July 8, 1959.)

Mexico**ENSENADA AREA FISHERY TRENDS, JULY 1959:**

The Mexican Office of Fishery Inspection in Ensenada reports that the 1958/59 spiny lobster season (October to March) was exceptionally good. About 1,960,000 pounds of spiny lobster were landed as compared with average annual landings of 1,000,000 pounds.

The fish canneries in Ensenada, which have been complaining of lack of business for the past few years, are doing better. Two which have been idle are now working again. There are now ten canneries operating in the Ensenada area, the United States Consulate in Tijuana reported on July 10, 1959.

**New Zealand****FISHERIES TRENDS, 1958:**

Landings in 1958 of fish and shellfish in New Zealand of about 55.3 million pounds were down about 1 percent from the 55.8 million pounds landed in 1957. The lower demand for export fish, especially to Australia, contributed to a lower catch.

Spiny lobster landings in 1958 declined 12 percent to 9.8 million pounds from 11.1 million pounds in 1957. The 1958 landings of this product were close to 33.2 percent under the landings for 1956. The record catch of 183 humpback whales at Tory Channel Station in 1958 yielded 1,538 short tons of whale oil, 448 tons of whale meat, and 134 tons of bone meal. The station at Great Barrier Island did not operate during 1958, but will operate in 1959. The season so far in 1959 has been exceptionally good with more whales than available catchers.

Exports of frozen fish declined to about 5.3 million pounds in 1958 from 7.3 million pounds in 1957 and spiny lobster exports (mostly tails) dropped sharply to only 2.6 million pounds from 4.4 million pounds in 1957. Most of the tails are exported to the United States.

New Zealand (Contd.):

During 1958, regional committees, consisting of representatives of the wholesale, retail, and production side of the fish industry were set up in Auckland, Gisborne, Napier, Wellington, Otago, West Coast, and Nelson to assist and guide the Fishing Industry Advisory Council in the consideration of local problems. The question of licensing of the fishing industry has been under study and a report on this problem prepared by the Council is being examined by the Marine Department.



Norway

FISHING AND WHALING
INDUSTRY TRENDS, JUNE 1959:

A total of 769,503 metric tons of fish was landed in Norway from January 1 to

June 13, 1959, as compared to 765,611 and 1,183,144 tons during the same periods of 1958 and 1957, respectively. Most of the annual catch is landed during the first half of the year.

The fishermen's marketing organization (Norges Raafisklag) in North Norway and the dominant fish filleting and freezing concern (Norsk Frossenfisk A/L) are in a long and bitter dispute over fish prices. The Government recently ruled that the difference between the prices set by the marketing association for fish sold to the freezing industry and for similar fish sold to dryers and salters shall be substantially less than that heretofore in effect. The marketing association immediately renounced an agreement it had recently concluded with the freezing industry providing for somewhat lower prices during the summer months. The fish fillet and freezing concern has announced its intention to sue the fishermen's marketing organization for breach of contract.



On the herring fishing grounds off west coast of Norway. Large purse seine set around a submerged school of herring. Seine has been pursed and net is lifted into the mechanized purse-seine dories to concentrate the fish in the bag of the net.

Norway (Contd.):

The Ministry of Fisheries has submitted a report to the Norwegian Storting with proposals for improving profits in the fishing industry. These proposals are based on the recommendations of the Brofoss Committee and differ from them only in detail. The Ministry recommends, among other things, the replacement of many of the smaller boats with 65- to 85-foot vessels, the building of more large ocean-going trawlers, the use of more powerful engines, increased fisheries research, additional credit facilities for fishermen, and subsidies on tackle and equipment to take the place of fish-price supports.

Replying to a question in the Storting, the Foreign Minister stated on May 19, 1959, according to the press account, that the extension by the Faroe Islands of its fishing boundary would not adversely affect Norwegian fishing interests. He added that Norway would continue to take no unilateral action on the fishing boundary question before it had been discussed at the Law of the Sea Conference scheduled to be held in Geneva next year.

Following the meeting of the International Whaling Convention in London, which ended in a deadlock and resulted in Norway's withdrawal from the Convention, the Minister of Industry and Handicrafts was reported to have stated that Norway will continue to abide by the regulations of the Convention pertaining to the conservation of whale stocks and that toward this end the Government will later in the summer establish a national quota for the Norwegian expeditions. He is reported to have stated further that in the event any initiative is taken to hold further talks on the allocation of whale quotas among the whaling nations, Norway would promptly participate.

The last unsold stocks of whale oil from the Norwegian production during the 1958/59 Antarctic whaling season have been sold. (United States Embassy dispatch from Oslo, dated July 16, 1959.)

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MARINE OILS AND FISH MEAL PRODUCTION, FOREIGN TRADE, AND DISTRIBUTION, 1956-1959:

Marine Oil: PRODUCTION: Total production of marine oils by Norway declined from about 257,000 metric tons in 1957 to about 202,000 tons in 1958, and is expected to remain at roughly 200,000 tons in 1959. The forecast for 1959 is based on the final estimates of the Antarctic whaling expedition and the returns from the Norwegian winter herring fisheries (both of which are completed for 1959).

The production of Antarctic whale and sperm oil was lower by 15 percent in the 1957/1958 season. The nine Norwegian expeditions participating in the 1957/1958 whaling season produced 123,946 tons of whale oil and 20,751 tons of sperm oil. The Norwegian shore station at Husvik Harbor was not operated during 1958.

Preliminary results from the 1958/59 Antarctic whaling season indicate a further reduction of whale and sperm oil production. According to preliminary reports, the total Norwegian production of whale oil from the nine floating expeditions and the Norwegian shore station at Husvik Harbor is only 123,803 tons of whale oil and 14,904 tons of sperm oil.

The 1958/59 pelagic season started January 7 and ended on March 16, 1959, while the Norwegian shore station was in operation from October 1, 1958, through March 31, 1959.

The two Norwegian shore stations which operate with six catcher boats off the coast of Norway produced 672 tons of sperm oil and 612 tons of whale oil in 1958 as compared with 227 tons of sperm oil and 769 tons of whale oil in 1957. The two stations operated in the summer of 1959.

The production of herring oil in 1958 totaled only 34,000 tons in 1958 as compared with 17,424 tons in 1959 and 110,828 tons in the record year of 1956. The winter herring, which is the main basis for the Norwegian production of herring oil, arrived late in the season and, in addition, fishing was severely hampered by high winds. As a result, the total catch was only 3,712 million hectoliters (345,116 metric tons), or 43 percent of the catch in 1957, which also was a poor year.

The outlook for 1959, although slightly better than in 1958, is still not very promising.

The Ministry of Fisheries, which furnishes the most accurate estimates on fish-liver oil production, has estimated that total production of fish-liver oil in 1958 totaled about 16,500 tons, or about 18 percent more than in 1957. Preliminary reports indicate a further increase in the production of fish-liver oil in 1959.

The results from the 1958 sealing season were very good. The registered catch of seals was increased from 208,271 in 1957 to 260,819 in 1958. The total landed value of the catch increased from 12.5 million kroner (US\$1.8 million) to 17.2 million kroner (US\$2.4 million) and the estimated production of seal oil was about 5,500 tons as compared with about 4,700 tons in 1957.

Norway (Contd.):

Commodity	1959 ^{1/}	1958	1957	1956
	(Metric Tons)			
Cold cleared cod-liver oil	12,000	11,900	10,300	12,400
Other fish-liver oils	5,000	4,600	3,700	4,500
Herring oil	43,000	34,000	67,424	110,828
Total fish oils	60,000	50,000	81,424	127,728
Seal oil	5,000	5,500	4,700	5,000
Sperm oil:				
Antarctic	14,904	20,751	16,874	22,569
Shore stations	400	672	227	469
Total sperm oil	14,304	21,423	17,101	23,038
Whale oil:				
Antarctic	123,803	123,946	153,167	121,898
Shore stations	600	612	769	649
Total whale oil	124,403	124,558	153,936	122,547
TOTAL MARINE OILS	203,707	201,981	257,161	278,213

^{1/} Forecast

Commodity	1958			1957		
	Metric Tons	1,000 Kr.	US\$ 1,000	Metric Tons	1,000 Kr.	US\$ 1,000
Whale oil, crude	2,326	3,798	532	708	921	129
Sperm & bottlenose oil, crude	589	731	102	1,527	2,624	367
Herring oil, crude	6,632	8,352	1,169	13,269	19,811	2,773
High-potency (vitamin A) marine-animal oils	919	5,610	785	1,070	6,466	905
Cod-liver oil	-	-	1/	977	1,811	254
Veterinary fish-liver oil	5	3	-	134	268	38
Industrial fish-liver oil	362	512	72	746	1,338	187
Mixed fish-liver oil	4,186	4,768	668	902	1,198	168
Residual fish-liver oil	694	538	75	1,214	1,297	182
Total	15,713	24,312	3,403	20,547	35,734	5,003

^{1/} Less than US\$500.

Note: Values converted at rate of 7.143 Kr.=US\$1.

Commodity	1958			1957		
	Metric Tons	1,000 Kr.	US\$ 1,000	Metric Tons	1,000 Kr.	US\$ 1,000
Whale oil, crude ^{1/}	95,099	135,911	19,027	106,215	175,709	24,599
Sperm & bottlenose oil	14,353	19,719	2,761	9,771	15,940	2,232
Herring oil, crude	240	307	43	566	901	126
Seal oil, crude	4,144	5,786	810	5,136	8,145	1,140
Fish-liver oils	17,763	34,429	4,820	16,348	35,998	5,040
Refined marine oils, edible	1,661	3,330	466	2,100	4,539	635
Refined marine oils, other	1,252	1,946	272	2,569	4,847	679
Marine-animal oils, polymerized, oxidized, etc., edible	592	1,134	159	948	1,951	273
Hardened fats from marine-animal oils, edible	39,469	77,735	10,883	49,786	111,361	15,590
Hardened fats from marine-animal oils, for technical use	7,503	12,657	1,772	10,157	19,325	2,705
Fatty acids from marine oils	4,011	6,674	934	4,900	7,726	1,082
Products from sperm & bottlenose oils	4,221	10,126	1,418	4,322	10,446	1,462
Other products	2,238	4,465	625	1,395	3,056	428
Total	192,546	314,219	43,990	214,213	399,944	55,991

^{1/} Including sales made directly from the Antarctic.

Country	1958	1957
	(Long Tons)	
Norway	31,677	54,255
West Germany	25,012	23,589
United Kingdom	30,573	23,052
Sweden	3,537	1,763
Denmark	4,993	10,083
France	12,121	11,332
Netherlands	12,460	23,230
Belgium-Luxemburg	2,120	3,645
Total	122,493	151,447

Source: "Economic Survey 1958."

	1958	1957 ^{1/}	1956 ^{1/}
	(Metric Tons)		
Stocks, January 1	72,019	68,410	51,417
Production	201,981	257,161	278,213
Imports	15,713	20,547	19,180
Total supply	289,713	346,118	348,810
Exports	192,546	214,213	202,381
Consumption	52,276	59,886	78,019
Stocks, December 31	44,891	72,019	68,410
Total distribution	289,713	346,118	348,810

^{1/} Revised.

Norway (Contd.):

Product	1958	1957	1956	1955	1954
	(Metric Tons)				
Crude herring oil & whale oil . . .	44,580	71,764	67,981	48,237	47,814
Other marine oil . . .	311	355	439	3,180	1,469
Total	44,891	72,019	68,410	51,417	49,283

low the price obtained for the oil produced during the 1956/57 season. The prices varied greatly-- about 2,000 tons were sold at £80 (US\$224.80) per long ton; 5,000 long tons at £78 £78 15s.(US\$219.39); 500 long tons at £70 (US\$196.70); 45,991 long tons at £77 10s. (US\$216.42); and 68,500 long tons were sold at £67 10s. (US\$188.41). The total value of the 1957/58 whale oil production was about 176 million kroner (US\$24.6 million) as compared with 256 million kroner (US\$35.8 million) in 1956/57.

Country of Destination	1958			1957		
	Metric Tons	1,000 Kr.	US\$ 1,000	Metric Tons	1,000 Kr.	US\$ 1,000
United States	116	118	17	3,642	3,681	515
Italy	3,341	3,785	530	2,529	2,992	419
Switzerland	9,878	10,001	1,400	7,921	8,055	1,128
Sweden	7,834	8,878	1,243	9,043	10,884	1,524
West Germany	13,972	15,135	2,119	20,825	23,992	3,359
Austria	3,706	3,924	549	2,796	3,120	437
Belgium-Luxemburg	9,578	10,901	1,526	9,695	11,544	1,616
Denmark	3,860	3,802	532	4,156	4,204	589
France	15,864	18,153	2,541	15,038	17,836	2,497
Netherlands	11,329	13,096	1,833	17,491	20,850	2,919
United Kingdom	18,394	21,471	3,006	32,132	38,258	5,356
Israel	1,237	1,478	207	3,469	3,958	558
Others	6,855	7,998	1,120	5,961	7,239	1,013
Total	1/ 105,964	118,738	16,623	2/ 134,699	156,613	21,925

1/ Of which 89,437 tons valued at 103 million kroner (US\$14.4 million) were herring meal.
2/ Of which 120,468 tons, valued at 142.9 million kroner (US\$20 million), were herring meal.

FOREIGN TRADE: Mainly as a result of a substantial reduction in imports of herring oil, total Norwegian imports of all marine oils were reduced from 20,547 tons in 1957 to 15,713 tons in 1958.

Exports of crude and processed marine animal oils were reduced from 214,213 tons in 1957 to 192,546 tons in 1958.

Fish-liver oil exports in 1958 increased somewhat over 1957 exports mainly as a result of a substantial increase in sales to Czechoslovakia, which purchased about 5,100 tons, or close to 30 percent of total Norwegian exports of fish-liver oils.

Exports of crude herring oil were down to 240 tons in 1958 as compared with 566 tons in 1957 and 1,839 tons in 1956 as a result of the low herring oil production. Seal oil exports were 4,144 tons in 1958, or about 20 percent less than in 1957. More than 95 percent of total seal oil exports were sold to West Germany.

Total exports of hardened edible marine oils were 39,500 tons in 1958 as compared with 49,800 tons in 1957. The U.S.S.R. was the main purchaser with 27,000 tons, or about 68 percent of the total exports. In 1957, U.S.S.R. imported 33,000 tons or about 66 percent of Norway's total exports of hardened edible marine oils. As in previous trade agreements between Norway and U.S.S.R., some 30,000 tons of hardened marine fats were included in the agreement for 1959.

DISTRIBUTION AND PRICES: Norwegian production of whale and sperm oil from the 1957/58 Antarctic season was sold, as usual, through the Norwegian whaling companies' common marketing pool.

The average price for whale oil in 1958 was £72 (US\$202.32) per long ton, or about 16 percent be-

According to reports, the Norwegian whaling companies have sold about 91,500 long tons of this year's production to a large British firm and to the Norwegian whale oil hardening plant at £72 10s. (US\$202.46) per long ton. In addition, about 9,500 long tons have been sold at prices varying between £74 (US\$207.94) and £75 (US\$210.75). Prices show a slight improvement over the 1958 level.

Sperm oil prices were substantially reduced in 1958 (average price was £65 (US\$182.65) per long ton) or about 22 percent below the prices obtained for the 1956/57 production. Because the sperm oil production was higher in 1957/58 than during 1956/57, the total value declined only from 28 million kroner (US\$3.9 million) to 27 million kroner (US\$3.8 million).

STOCKS: Stocks of marine oils decreased by about 38 percent from 1957 and totaled 44,891 tons at the end of 1958.

CONSUMPTION: According to estimates on the basis of available statistics, the Norwegian consumption of marine oils and products was reduced from about 60,000 tons in 1957 to about 52,300 tons in 1958.

Fish Meal: PRODUCTION: Norway's production of fish meal dropped from about 175,000 tons in 1957 to about 95,000 tons in 1958, as a result of the poor herring catch in 1958. Results from the 1959 herring season indicate that the production of herring and other fish meal will increase somewhat and may reach 115,000 or 120,000 tons.

EXPORTS: Fish meal exports dropped from 134,699 tons in 1957 to 105,964 tons in 1958. The United Kingdom, France, West Germany, and the Netherlands provide the best markets for Norwegian fish meal.

Norway (Contd.):

The average export price for fish meal dropped from 1,162 kroner (US\$162.68) per ton in 1957 to about 1,123 kroner (US\$157.22) per ton in 1958.



Pakistan

FISHERIES DEVELOPMENT PROGRAM EXPECTED TO STIMULATE SHRIMP EXPORTS:

Six private trawlers and more than 50 boats fitted with marine Diesel engines are expected to join the present small fishing fleet of 2 modern fishing trawlers and 75 fishing boats during the next fishing season to stimulate Pakistan's frozen and canned shrimp export trade. During four months of operations (December 1958-March 1959), two trawlers which are operated by the Fisheries Department caught 225,232 pounds of shrimp and fish valued at Rs. 125,000 (\$26,250).

Apart from the Government fisheries programs, the Government of Pakistan has recently sanctioned the following



Small fish and shrimp are unloaded from the boat and carried ashore in mat baskets at the fishing village of Ibrahim Hydri, West Pakistan, about 11 miles from Karachi.

fisheries development program under the private sector for implementation within the course of a year at the total cost of about Rs. 12,000,000 (\$2,520,000). Three-fourths of this sum will be available in foreign exchange.

The development program includes the following:

Production: Karachi: carrier vessels 2; mechanized fishing boats 8; shrimp trawler 1. Makran Coast including Gwadur; carrier vessels 1; mechanized fishing boats 4; shrimp trawler 1. West Pakistan: insulated vans 4; insulated boxes 1,000. East Pakistan: fishing launches and boats 4 (Khulna coastal Area 2, Chittagong & Cox's Bazar Area 2); carrier vessels 2 (Khulna Area 1, Chittagong 1); insulated vans 4; shrimp trawler 2 (Khulna Area 1, Chittagong 1); cold storages 4 (one each at Sylhet, Khulna, Rajbari, and Chittagong); ice plants 4 (one each at Sylhet, Khulna, Khopupara, and Goalando).

Fish Industries: Makran Coast: shrimp freezing plants 2, canning plants 2, and fish meal plants 2. East Pakistan: shrimp freezing plants 2, canning plants 2, and fish meal plant 1.

The Pakistan Government will give reasonable assistance to private parties who may wish to take advantage of and participate in this program. Cooperative Societies will be given preferential treatment (Pakistan Affairs, July 1, 1959).



Peru

EXPORTS OF SELECTED MARINE PRODUCTS, JANUARY-MARCH 1958 and 1959:

During the first quarter of this year Peru's exports of selected marine products were up sharply from the same period in 1958. Exports of fish meal in January-March this year of 51,058 metric tons were more than double the

Product	First Quarter	
	1959	1958
	... (Metric Tons) ...	
Canned bonito . .	3,540	2,884
Fish meal	51,058	24,492
Tuna, frozen . .	2,976	1,401
Skipjack, frozen	930	640
Sperm oil	3,749	2,790

24,492 tons exported in the same months of last year. The f.o.b. value of fish meal

Peru (Contd.):

exports for the same period rose about 110.7 percent or from US\$2.8 million in 1959.

At the present time there are about 70 fish-meal reduction plants in Peru and further expansion of this industry is expected to raise the production to 180,000 metric tons yearly. Fish-meal consumption in Peru is about 350 tons a month, mostly as a supplement for poultry and hog feeds. The balance of the production is finding a ready market in Europe and the United States.

Fish-meal production in 1958 was estimated at 112,000 metric tons, almost double the production in 1957.



Portugal

CANNED FISH EXPORTS,
JANUARY-APRIL 1959:

Exports of canned fish by Portugal during January-April 1959 amounted to 21,755 metric tons (1,201,000 cases), valued at US\$11.2 million, as compared with 17,875 tons, valued at US\$10.0 million, for the same period in 1958. Sardines in olive oil exported during the first 4 months of 1959 amounted to 15,737 tons, valued at US\$7.8 million.

Products	January-April 1959	
	Metric Tons	US\$ 1,000
Sardines in olive oil	15,737	7,777
Sardines & sardinelike fish in brine . .	673	136
Tuna & tunalike fish in olive oil . . .	772	558
Anchovy fillets	2,277	1,597
Mackerel in olive oil	1,519	746
Other fish	777	427
Total	21,755	11,241

During January-April 1959, the leading canned fish buyer was Germany with 4,913 tons (valued at US\$2.4 million), followed by Italy with 2,880 tons (valued at US\$1.5 million), the United States with 2,049 tons (valued at US\$1.5 million), Belgium-Luxembourg with 1,775 tons (valued at US\$867,000), and Great Britain with 1,736 tons (valued at US\$828,000).

Exports to the United States included 1,037 tons of anchovies, 49 tons of tuna, 919 tons of sardines, and 19 tons of mackerel. (Conservas de Peixe, June 1959).

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CANNED FISH PACK,
JANUARY-APRIL 1959:

The total pack of canned fish for January-April 1959 amounted to 5,175 metric tons as compared with 5,424 tons for

Product	Net Weight	Cases
	Metric Tons	US\$ 1,000
In Olive Oil:		
Sardines	2,013	106
Sardinelike fish	5	-
Anchovy fillets	2,387	238
Tuna	341	12
Mackerel	3	-
Other Species	426	22
Total	5,175	378

the same period in 1958. Canned sardines in oil (2,013 tons) accounted for 38.9 percent of the total pack in the first four months of 1959, lower by 30.0 percent than the pack of 2,876 tons for the same period of 1958, the June 1959 Conservas de Peixe reports.

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FISHERIES TRENDS,
JANUARY-APRIL 1959:

Sardine Fishing: During January-April 1959, the Portuguese fishing fleet landed 5,778 metric tons of sardines (valued at US\$554,817 ex-vessel or about US\$96 a ton).

A total of 1,706 tons of sardines (valued at US\$210,052) was landed in April 1959, the bulk being purchased for the local fresh fish market. Very little was canned or salted.

Other Fishing: The January-April 1959 landings of fish other than sardines were principally 8,084 tons of chinchards (value US\$397,530). (Conservas de Peixe, June 1959.)



South-West Africa

PILCHARD-MAASBANKER CATCH QUOTA INCREASED FOR 1959:

For six years, from 1953, the pelagic shoal fish (mostly pilchards) quota for South-West Africa's Walvis Bay area has been fixed and maintained at a steady 250,000 short tons a year. From 1959, however, the annual quota is to be raised slightly from 250,000 to 260,000 tons. During the 1959 season only, the six processing factories at Walvis Bay have been granted an additional quota of 40,000 tons. This raises the pilchard-maasbanker quota in 1959 to 300,000 tons.

The Head of the Fisheries Department said that this increase is a practical measure to include a growing catch of maasbanker or jack mackerel in the quota. Although the Walvis Bay catch consists almost entirely of pilchards, maasbanker do occasionally appear among the fish landed. Two or three years ago those fish accounted for only about 1,000 tons of total landings, but the quantity increased to some 6,000 tons last year. The addition to the quota will allow for this increase and also extend the ceiling to both types of pelagic shoal fish.

The first pilchards caught this season had been brought in about the middle of February. But until the end of March the catch and the condition of the fish were very poor and most of the factories and boats waited for an improvement. This came during April and the season is now well under way. (The South African Shipping News and Fishing Industry Review, May 1959.)



Spain

NORWEGIAN PROPOSAL FOR TUNA FISHING OPERATION OUT OF SPANISH PORT REJECTED:

A Norwegian fishery company's proposal to set up tuna fishing operations using Norwegian fishing vessels based at the port of Ceuta, Spain, was rejected at a recent meeting of the Permanent

Commission of the Economic Section of Spain's National Fisheries Syndicate.

The Norwegian proposal was considered as very important by the Commission, especially in view of the harm caused to Spain's export market in Italy by Japanese competition with Atlantic tuna. The Commission decided that the establishment of a Norwegian tuna fishing base at Ceuta might hinder the economic progress of Spain's tuna fishing industry. (Boletín de Información, no. 9, June 1959, Sindicato Nacional de la Pesca, Madrid, Spain.)



Sweden

MARINE OILS AND FISH MEAL-- PRODUCTION, FOREIGN TRADE, SUPPLY, AND PRICES, 1957-1959:

Supply: Edible oils derived from fish and whales (51,561 metric tons) made up about 30 percent of Sweden's 1957-1959 average annual supply of all edible vegetable and animal oils and fat (169,756 metric tons). Edible marine oils (used largely for the manufacture of oleomargarine) are practically all imported. Other marine oils (inedible whale and fish oils and fish-liver oils) are primarily of domestic origin.

Imports: During 1958, a total of 26,697 tons of edible whale and fish oil were imported as compared with 41,486 tons in 1957. Inedible whale and fish oil imports dropped from 284 tons in 1957 to 232 tons in 1958; fish-liver oil imports of 1,257 tons in 1958 were up 106 tons from 1957.

Exports: Exports of marine oils by Sweden are largely inedible whale oil. In 1958, 1,788 tons of inedible whale oil were exported, 105 tons less than 1957 exports of 1,893 tons. Only very small quantities of fish-liver oils are exported.

Fish Meal: Sweden's supply of whale and fish meal averaged annually about 17,000 tons for the 1957-1959 period and was made up of 2,500 tons produced in Sweden and the balance of imported fish meal. In both 1958 and 1957 Nor-

Sweden (Contd.):

Table 1 - Sweden's Supply and Distribution of Marine Oils, 1957-1959

Type	Opening Stocks, Jan. 1	Production	Imports	Total Supply	Exports	Domestic Consumption	Ending Stocks, Dec. 31
(Metric Tons)							
1959 ^{1/} :							
Whale & fish oils, edible . . .	19,900	-	30,000	49,900	-	27,900	22,000
Whale & fish oils, inedible . .	2/	3,200	300	3,700	1,800	1,900	2/
Fish-liveroil, inedible. . .	400	2,400	1,200	4,000	10	3,590	400
1958:							
Whale & fish oils, edible . . .	23,400	-	26,696	50,096	-	30,196	19,900
Whale & fish oils, inedible . .	2/	3,200	229	3,429	1,788	1,641	2/
Fish-liveroil, inedible . . .	400	2,300	1,256	3,956	7	3,549	400
1957:							
Whale & fish oils, edible . . .	13,200	-	41,486	54,686	-	31,286	23,400
Whale & fish oils, inedible . .	2/	3,000	285	3,285	1,894	1,391	2/
Fish-liveroil, inedible . . .	400	2,400	1,152	3,952	110	3,442	400

1/ Estimated.

2/ Included with edible.

Table 2 - Sweden's Supply and Distribution of Whale and Fish Meal, 1957-1959^{1/}

Whale and Fish Meal	Opening Stocks, Jan. 1	Production	Imports	Total Supply	Exports	Domestic Consumption	Ending Stocks, Dec. 31
(Metric Tons)							
1959	2/	2,500	15,000	17,500	-	17,500	2/
1958	2/	2,500	13,296	15,796	-	15,796	2/
1957	2/	2,500	15,480	17,980	-	17,980	2/

1/ Estimated.

2/ Unavailable.

Table 3 - Sweden's Imports of Marine Oils by Country of Origin, 1957-1958

Country	Fish-Liver Oil		Edible Whale Oil		Inedible Whale Oil	
	1958	1957	1958	1957	1958	1957
(Metric Tons)						
Norway	1,254	1,074	3,685	2,995	184	235
Denmark	3	20	7,477	5,483	40	21
West Germany	-	15	9,365	9,352	7	28
Argentina	-	-	3,358	-	-	-
Australia	-	-	1,112	1,936	-	-
United Kingdom	-	-	-	514	-	-
Japan	-	3	-	4,973	-	-
Iceland	-	39	1,700	4,825	-	-
United States	-	-	-	11,408	1	-
Total	1,257	1,151	26,697	41,486	232	284

Table 4 - Sweden's Exports of Marine Oils by Country of Destination, 1957-1958

Country	Fish-Liver Oil		Inedible Whale Oil	
	1958	1957	1958	1957
(Metric Tons)				
West Germany	7	110	230	292
Norway	-	-	1,058	947
Denmark	-	-	477	632
Austria	-	-	20	20
Other	-	-	3	2
Total	7	110	1,788	1,893

Table 5 - Sweden's Imports of Fish Meal by Country of Origin, 1957-1958

Country	1958	1957
(Metric Tons)		
Denmark	531	504
Iceland	3,080	4,024
Norway	7,860	8,514
Total	11,471	13,042

way was the principal supplier of fish meal to Sweden, followed by Iceland and Denmark.

Import and Regulation Taxes: Although all types of oil seed, fats and oils, oil

cakes and meal may enter Sweden free of duty, import and regulation taxes are levied at changing rates on those products. In lieu of tariffs, an import tax of 39 kroner per 100 kilograms (about 3.4 U. S. cents a pound) except for stearine which is 46.35 kroner per 100 kilograms (4.1 U. S. cents a pound) is levied. The regulation tax is about 50 kroner per 100 kilograms (about 4.8 U. S. cents a pound). The purpose of the import and regulation taxes is to protect the domestic butter industry and the producers of oil seeds. Regulation taxes are also applied to fats and oils derived from seed produced in Sweden. Products of the food industries containing fats will also be subject to import and regulation taxes on the basis of the fat content. But the Swedish processors of fats and oils for soap, paints, and other industrial

Sweden (Contd.):

products received rebates for import and regulation taxes.

Table 6 - Wholesale Prices^{1/} of Marine Oils as of April 1, 1959

Product	Kroner Per Kiloqram	US\$ Per Metric Ton
Whale oil, hydrogenated, raw	2.30	443.90
Whale oil, hydrogenated, refined . .	2.44	470.92
Whale oil fatty acids. . . .	1.55	299.15
Whale oil fatty acids distilled & hydrogenated .	1.75	337.75

^{1/} Prices are in metric-ton lots for delivery in tank cars c.i.f buyers' nearest port and include import and regulation taxes at 0.89 kroner per kilogram (7.8 U. S. cents a pound).

Effective September 1, 1959, a modified price and market program will become effective. The principal change will be that no limit will be set for the import tax. This program will be in effect for six years.



Trinidad

JAPANESE TRAWLER TO EXPLORE FOR SHRIMP OFF COAST:

Early in July 1959, the Japanese vessel *Genei Maru* (180 tons), owned by a Japanese fishery firm and jointly sponsored by two other firms, sailed for Trinidad. It was expected that when the vessel arrived at its Trinidad base, it would trawl for shrimp for about two months in order to determine whether or not it would be economically worthwhile.



Uganda

LAKE FISHERIES THRIVE DESPITE MASS MORTALITY DISASTERS:

Despite natural disasters which kill vast numbers of fish, the Uganda Lakes are now supporting a thriving commercial fishery, reports a fisheries biologist in the California Department of Fish and Game who has just returned from an assignment in Uganda on behalf of the Food and Agriculture Organization (FAO), Rome, Italy.

"I think, though, that the commercial fish catch at Lake George is now near to

the maximum that can be maintained without injury to the stocks," the biologist reports. "Last year, for example, some 5,000,000 tilapia were taken by the fishermen. They also took, of course, great quantities of other commercial species, such as catfish."

The California biologist, who continued the work of another FAO expert, has been engaged in trying to find out how much the Uganda lake fisheries can be exploited. He has been doing this through tagging and experimental fishing with various kinds of nets.



In 1958 under FAO a United States marine biologist with a native team of nine assistants evaluated the fisheries resources of Lake George, Uganda. Nets were tied systematically at representative spots in the lake. Here one of the gill nets is being pulled into the boat. The fish caught were sorted by species, counted, and weighed, which made it possible to make an estimate of the fish resources of the lake.

"I think we have reached the stage where, by using the Beverton-Holt method of stock assessment, we can determine the extent to which these lakes can be fished without damage to the stocks," points out the biologist. "But before we can arrive at a conclusion, the data we have gathered must be thoroughly analyzed. The answer will show whether or not my suspicion that the present rate of fishing is near the maximum is correct."

Referring to the extensive mortality of fish due to natural phenomena, he

Uganda (Contd.):

explained that such disasters follow a period of hot weather and take place in water which is sheltered from the wind. The area in Lake George where these disasters take place lies under the lee of a high escarpment. The water is protected from the wind and during hot weather the growth of algae builds up, then perhaps just before dawn when oxygen demand is highest, a violent thunderstorm breaks which stirs up the algae and the bottom sediment. The algae absorb the oxygen in the water, which has become thick and muddy, and the fish are suffocated. It was estimated that some 450,000 tilapia were killed the last time this phenomenon took place. Unfortunately, the disaster seems to strike the most mature of the fish and thousands of tilapia weighing as much as $1\frac{3}{4}$ pounds were killed.

The fishermen on the Lake are able to reap a good harvest of catfish when a natural mass mortality of tilapia occurs since the tilapia do not rise until they are spoiling. The first intimation of the last disaster was when the fishermen landed ten times as many catfish as they normally do. The day of the disaster they took, for instance, 2,700 catfish to the fishing station and probably they collected thousands more for their own consumption while, in addition, many thousands of other catfish must have died at the time.

The interesting point about these disasters, which apparently occur every year, perhaps more than once a year, is that they do not appear to affect the viability of the stocks. Indeed, in the days following the last disaster more fish were caught in the gill nets and then, about a week later, the catch reverted to normal.



Union of South Africa

UNION AND SOUTH-WEST AFRICA PILCHARD-MAASBANKER FISHERY TRENDS, JULY 1959:

Both the Union of South Africa and South-West Africa are reported to be

having a very successful pelagic (mostly pilchards, maasbanker or jack mackerel, or mackerel) fishing season this year. Landings from the pilchard-maasbanker fishery in the Union as of June 30, 1959, amounted to 221,646 metric tons. In addition, 36,425 tons of mackerel had been landed. The 250,000-ton annual quota for pilchards and maasbanker in the Union is expected to be filled long before August 31 and the season is expected to be declared ended by Union fishery officials by the end of August as was the case in 1958.

The South-West African Administration announced about the middle of July that the pilchard-maasbanker quota for this year would be 300,000 tons, an increase of 50,000 tons over 1958. There seems to be little doubt that this increased catch quota can be attained this year. The decision to raise the South-West Africa quota this year was attributed to increases in the proportion of maasbankers in the combined pilchard-maasbanker catch plus an improvement in the size and age of the pilchards in the catches of this species this year, and a desire to meet increasing competition from the Peruvian fish meal in world markets. Production of fish meal by Peru is expected to increase sharply in 1959. In 1958, South-West Africa produced 46,200 tons of fish meal, according to a dispatch of July 24, from the United States Consulate in Cape Town.



U.S.S.R.

MORE FACTORY TRAWLERS FROM WEST GERMANY UNDER CONSIDERATION:

The Soviet Union expressed interest to West German authorities for an additional 16 to 18 large factory trawlers, according to *Dansk Fiskeritidende* (July 3, 1959), a Danish fishery trade periodical. It is reported from Bonn that such a large order would be divided among a number of shipyards if the Russian desires for credit and financing (involving a postponement of payment for 5 to 7 years) could be met. West Germany's largest shipyard built 24 trawlers of the

U.S.S.R. (Contd.):

"Pushkin" type, each measuring 2,450 gross tons, for Russia in 1956 and 1957.



United Kingdom

BRITISH FIRM COMPETES WITH U. S. BUYERS FOR AUSTRALIAN SUPPLIES OF SPINY LOBSTER TAILS:

A large Grimsby, England, fishing and marketing firm has entered the Western Australia market to buy spiny lobster tails in competition with United States buyers. The Grimsby firm, which requires large quantities of spiny lobster tails for marketing in England, has also purchased an established Australian company. The former owner of the Australian firm, who is now a director of the British firm, was in Perth, Australia, in June to negotiate the purchase of spiny lobster tails. The director stated that a new market had been opened in Britain for spiny lobsters and large purchases were being negotiated. He also stated that negotiations were started to sell British frozen fish in West Australia. At present West Australia does not permit the sale of 14-oz. packages of frozen fish, which are standard in England. The help of the British Trade Commissioner's office in Perth is being sought to lift the restriction.

* * * * *

FISHERY LOANS INTEREST RATES LOWERED:

The British White Fish Authority rates of interest were changed on loans as of June 10, 1959. The new rates do not apply, however, where the final installment of a loan or interim installments in current cases were paid by the Authority before June 10, 1959. The other terms and conditions of the Authority's arrangements for loans are unchanged.

The new rates are: on loans for not more than 5 years, $4\frac{3}{4}$ percent; on loans for more than 5 years but not more than 10 years, 5 percent; on loans for more than 10 years but not more than 15 years, $5\frac{5}{8}$ percent; and on loans for more than 15 years, $5\frac{7}{8}$ percent.

The Authority's loans are connected with the building of new fishing vessels of not more than 140 feet; the purchase, in certain circumstances, of new engines and nets and gear for inshore vessels; the construction and equipment of processing plants; and the formation and development of cooperative organizations. (Fish Trades Gazette, June 20, 1959.)



Venezuela

JAPANESE TUNA VESSELS BEGIN FISHING FOR VENEZUELAN FIRM:

Two Japanese tuna long-liners (the No. 3 and No. 5 Boso Marus, 87-gross-ton boats) sailed from Japan in May under a joint operating agreement between the Chiba Prefecture Fisheries Promotion Company and Venezuelan interests. The new firm in Venezuela will operate a cannery and the two Japanese vessels will supply the raw tuna.

The vessels are now reported to have arrived in Venezuela and begun fishing out of Cumana. The joint enterprise is capitalized at 122 million yen (US\$339,000), of which the Japanese partners have put up 49.7 million yen (US\$138,000). The company will engage principally in tuna fishing, with a planned annual production of about 140 million yen (US\$389,000). (Suisan Keizai Shim-bun, July 7, 1959.)



Viet-Nam

BIDS FOR FISH COLD STORAGE AND ICE-MAKING PLANTS REQUESTED:

The Viet-Nam Central Purchasing Agency has called for bids on providing eight fish storage plants, each capable of making 10 metric tons of ice per day and storing 22 short tons of fish. These are to be constructed as part of fish distribution facilities, including landing stages and market facilities, at Go Cong, Cap St. Jacques, Ham Tan, Phan Thiet, Nha Trang, Tuy Hoa, Qui Nhon, and Tourane (Da Nang).

It is expected that all of the installations (a United States Overseas Mission

Viet-Nam (Contd.):

project) will be completed early in 1960. When the installations are completed, they should give considerable aid to commercial fishing in this country. Esti-

mated cost, including the expenses of an engineer to oversee construction and initial operation of the ice plants, is expected to be in the neighborhood of US\$410,000, the United States Embassy in Saigon reported on August 6, 1959.



FISH AND EGGS - A GOOD COMBINATION

The home economists of the Department's Bureau of Commercial Fisheries have developed these special kitchen-tested rec-

BAKED FILLETS WITH PUFFY CHEESE SAUCE

2 $\frac{1}{4}$ pounds fillets, fresh or frozen
 $\frac{1}{4}$ cup mayonnaise or salad dressing
 $\frac{1}{4}$ tablespoon chopped sweet pickle or pickle relish

$\frac{1}{4}$ cup grated cheese
 2 egg yolks, beaten
 2 egg whites, beaten

ipes, combining fish and eggs:

Thaw frozen fillets. Cut into serving-size por-

tions. Place in a single layer in a well-greased baking pan, 13 x 8 x 2 inches. Combine mayonnaise, sweet pickle, cheese, and egg yolk. Fold in egg white. Cover fish with the sauce. Bake in a moderate oven, 350° F., for 30 minutes or until fish flakes easily when tested with a fork and the sauce is brown. Serves 6.

Remove any shell or cartilage from crab meat. Fry bacon until lightly brown. Add onion and cook until tender. Combine eggs, milk, seasonings, and crab meat. Add to onion mixture and cook until eggs are firm, stirring occasionally. Serve on toast points. Serves 6.

SCRAMBLED CRAB AND EGGS

1 pound crab meat
 $\frac{1}{4}$ cup chopped bacon
 $\frac{1}{4}$ cup chopped onion
 4 eggs, beaten

$\frac{1}{4}$ cup milk
 $\frac{1}{4}$ teaspoon salt
 Dash pepper
 Toast points

Drain tuna. Flake. Melt butter; blend in flour and seasonings. Add milk gradually and cook until thick and smooth, stirring con-

TUNA SOUFFLE

1 can (6 $\frac{1}{2}$ or 7 ounces) tuna
 $\frac{1}{4}$ cup butter or other fat
 $\frac{1}{4}$ cup flour
 $\frac{1}{2}$ teaspoon salt
 Dash pepper

1 cup milk
 1 teaspoon Worcestershire sauce
 $\frac{1}{2}$ cup grated cheese
 6 egg yolks, beaten
 6 egg whites, beaten

stantly. Add Worcestershire sauce, cheese, and tuna; continue heating until cheese melts. Stir a little of the hot sauce into egg yolk; add to remaining sauce, stirring constantly. Fold into egg white.

Pour into a well-greased, 2-quart casserole. Bake in a moderate oven, 350° F., for 45 minutes or until souffle is firm in the center. Serves 6.