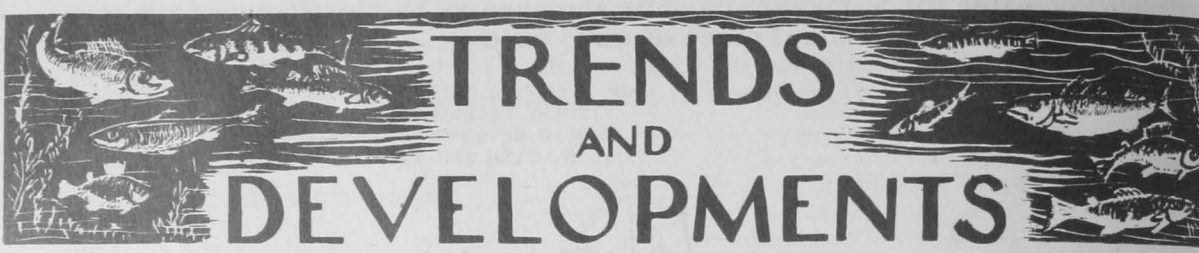


American Samoa

TUNA CANNING COMPANY PLANS TO EXPAND: The United States tuna can ning company located in American Samoa is planning the construction of a larger refrigeration plant, a new dock adjacent to the cannery, and dwelling houses for stateside employees. At the present time due to good production all warehouse space is occupied and operations are limited by this lack of space.

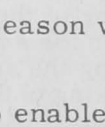
The freight vessel Thorshall left American Samoa about March 9 after loadin 900 tons of canned tuna (Samoa Bulletin, a weekly newspaper published in Apia, Western Samoa, March 15, 1957).

California

OPEN SARDINE SEASON ADVANCED ONE MONTH: A bill signed by the Gov ernor of California on June 4, 1957, advances the opening of the Southern Californ commercial sardine season from October 1 to September 1. The new opening dat is effective immediately. Now the Southern California sardine season will runfro September 1 to December 31. Formerly it lasted from October 1 to February 1.

The Northern California sardine season will now run from August 1 to Decem ber 31.

The earlier season is predicted to enable bigger sardine catches because fish ermen in the past few years have reported sighting large schools of sardines off San Pedro during September when in past seasons the closed season was in effect Sardine landings have been light during the past few years.



Cans--Shipments for Fishery Products, January-March 1957

Total shipments of metal cans for fish and sea food during Janua March 1957 amounted to 20,882 short tons of steel (based on the amou of steel consumed in the manufacture of cans), compared to 17,336 sh tons in January-March 1956. Some of the increase in the use of cans for fishery products is due to increased packs of canned mackerel an anchovies and the buying of cans for the heavy summer packing season.

Note: Statistics cover all commercial and captive plants known to be producing metal cans. Reported in base boxes of st consumed in the manufacture of cans, the data for fishery products are converted to tons of steel by using the factor: 2 base boxes of steel equal one short ton of steel.

Federal Purchases of Fishery Products

DEPARTMENT OF DEFENSE PURCHASES, JANUARY-MAY 1957: Fresh and Frozen Fishery Products: For the use of the Armed Forces under the Department of Defense, 2.6 million pounds (value $1.3 million) of fresh and frozen fishery products were purchased in May by the Military Subsistence Market Centers. This exceeded the quantity purchased in April by 43.4 percent, but was 3.0 percent less than the amount purchased in the same month a year ago. The value of the purchase this May was higher by 31.3 percent as compared with the previous month, but lower by 3.6 percent from May a year ago.

Table 1 - Fresh and Frozen Fishery Products Purchased by Military Subsistence Market Centers, May 1957 with Comparisons

QUANTITY				VALUE			
May		Jan.-May		May		Jan.-May	
1957	1956	1957	1956	1957	1956	1957	1956
(1,000 Lbs.)				($1,000)			
2,635	2,715	10,002	9,494	1,274	1,322	5,106	4,855

For the first five months of 1957 purchases totaled 10.0 million pounds, valued at $5.1 million--an increase of 5.4 percent in quantity and 5.2 percent in value as compared with the same period of 1956.

Table 2 - Canned Fishery Products Purchased by Military Subsistence Centers May 1957, with Comparisons

Species	QUANTITY		VALUE
	May	Jan.-May	May
	1957	1957	1957
	(1,000 Lbs.)		($1,000)
Tuna	346	1,187	153
Salmon	-	992	-
Sardine	42	73	14

Prices paid for fresh and frozen fishery products by the Department of Defense in May averaged 48.3 cents a pound, about 4.5 cents less than the 52.8 cents paid in April, and 0.4 cents below the 48.7 cents paid during May a year ago.

Canned Fishery Products: Tuna and sardines were the principal canned fishery products purchased for the use of the Armed Forces during May. The Armed Forces installations generally make some local purchases not included in the data given. Actual total purchases are higher than indicated, but it is not possible to obtain local purchases.

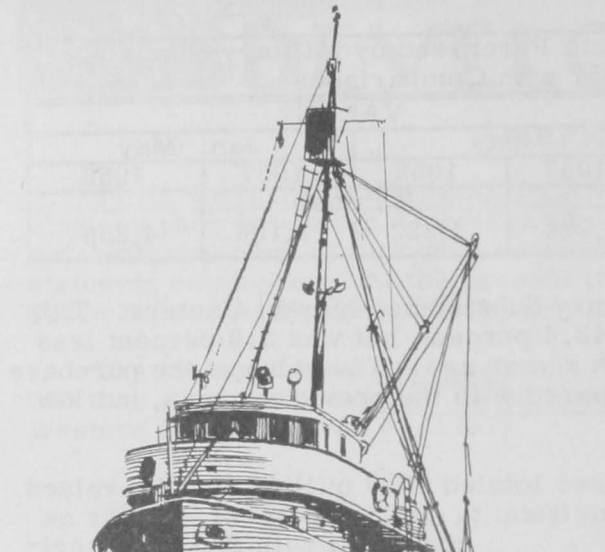
Fisheries Loan Fund

LOAN FUND APPLICATIONS NEAR LIMIT: A total of 234 applications for fishery loans, totalling $9,838,861, had been received by the Fish and Wildlife Service by May 20.

Of these, 99 have been approved for a total of $2,842,217, and 31 amounting to $502,466 have been declined because of ineligibility or other reasons.

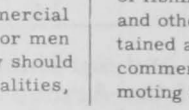
Fishery Methods and Equipment Specialist Examination

The U. S. Civil Service Commission announced on June 11, 1957 (Announcement No. 108 B) that applications will be accepted for the position of Fishery Methods and Equipment Specialist in Grades GS-5 to GS-12. Entrance salaries range from $3,670 to $7,570 a year. The Fish and Wildlife Service requires Specialists for exploratory fishing and for improving methods of fishery operations. Only commercial fishermen with the required specialized experience, or men trained in fishery engineering, technology, or biology should apply. The positions require sea duty in varying localities, chiefly in the Atlantic and Pacific Oceans. This is a continuously open unassembled examination.



Requirements are for 3 years of general experience and from one to four years (depending on the grade) of specialized experience. The successful completion of courses of study in a resident school or institution above high-school level with major study in the fields of fishery technology, fishery engineering, or fishery biology may be substituted on the basis of one year of education for one year of the required general or specialized experience. Types of qualifying experience are as follows: General: mate or engineer on a fishery vessel, net loft supervisor, commercial fisherman, licensed deck officer, and similar or closely related types of experience; Specialized: port captain or fleet supervisor of a fishery fleet, master of a fishery vessel over 25 net tons, navigator of fishing vessels operating offshore, designer of fishery vessels and equipment, cannery superintendent including supervision of fish production, technical employment in conducting fishery exploration or in developing fishery gear or equipment, and other closely related types of experience. Fishery Methods and Equipment Specialists advise on, direct, examine, analyze, or perform work in connection with: (1) the appraisal of fishery resources; (2) methods and techniques for locating new fishing areas and taking fish; (3) designing, fabricating, installing, and testing improved equipment for taking fish and for handling, storing, preserving, processing, and transporting fish at sea and on shore.

The duties include studying the occurrence and behavior of fish at sea and the best methods of locating them by visual, sonic, electronic, or other techniques; identifying species, and recording the number and weight of fish and the weather conditions at time of capture; studying the effectiveness of various kinds of bait and oxygen concentration; temperature, salinity, and other water conditions affecting survival of bait fishes; making tests on the effectiveness of varied types of fishing gear and studying the influence of weather, current and other conditions on their efficiency; analyzing data obtained at sea; and designing new equipment or methods, or recommending modification of those presently used, for promoting the economical capture of ocean fish.



Great Lakes Fishery Investigations

OPERATIONAL PLAN FOR RESEARCH VESSEL "CISCO" IN 1957: The Lake Erie research program will be expanded this year by the Service's Great Lakes Fishery Investigations. A field station will be established and a research vessel, the M/V Musky, will be assigned to the investigation. The M/V Cisco, although not permanently connected with the study, will spend the 1957 season in Lake Erie, and will assist in preliminary fishery surveys and experimental fishing.

Although commercial fish production in Lake Erie has suffered less than in the other Great Lakes, there has been a steady deterioration in the species composition of the stocks. In general, commercially-valuable species have become less abundant while low-priced and unsaleable varieties have increased--some tremendously. Some fishermen believe that the less valuable species have an adverse effect on the high-priced ones, either as competitors, or as predators on young and eggs. In addition, some of the unutilized fish become so numerous at times that they seriously hamper fishing operations. Drastic reduction of populations of these less desirable varieties through new commercial markets has been suggested. Not enough is known however, about the inter-relations of the species to predict with any degree of certainty

what effects changes in populations of one species might have on the others. A primary objective of the M/V Cisco operation during the 1957 season will be a study of inter-relations. Trawls, gill nets, and small-mesh seines will be used for systematic experimental fishing in various areas throughout the season. The catches will be examined for species composition and the different species will be studied for sex, age, and length distribution. Stomachs will be collected to learn as much as possible of the predator-prey relationships. A special attempt will be made to collect young fish since they are not common in samples taken from the commercial catch and little is known about them.

Extensive experimental trawling will be done for two other purposes: to determine how much trawling is needed in order to have obtained a reasonable representative sample, and to explore the feasibility of a commercial trawl fishery in Lake Erie. Plans include a certain amount of tagging of some of the more important species in the populations, mostly for fish movement studies.

No extensive hydrographic or limnological work will be carried out. Plankton samples, however, will be collected at all fishing stations and bottom samples at all trawling stations. Fine-mesh plankton nets will be used in order to catch organisms of all sizes. The main purpose will be to study changes in abundance of the several varieties of plankton and to record the presence of fish fry. Bottom samples will be collected in order to have a record of the composition of bottom organisms as they are today. If in the future a trawl fishery should develop, it would then be possible to ascertain how the dragging might affect the composition and production of bottom organisms.

During the early part of the season the Cisco will confine its operations to intensive studies of a few selected areas of Lake Erie.

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TRAWLING IN SHALLOW-WATER AREA OF LAKE ERIE OFF SANDUSKY, OHIO (M/V "Cisco" Cruise 1): Trawl catches in Lake Erie east of Kelly's Island, east of South Bass Island, and west of South Bass Island were dominated by smelt and sheepshead, with yellow perch especially well represented, during Cruise 1 (April 30-May 13) of the Service's research vessel Cisco. All fishing during the cruise was carried out in the shallow-water area among the islands off Sandusky, Ohio. The objective is to study the inter-relations of the various fish species in Lake Erie. Also common in many of the catches were emerald shiners, spotted shiners, and trout-perch. Taken in smaller quantities were walleyes, channel catfish, white bass, madtoms, silver chubs, and logperch. Many of the perch had just recently spawned but some had not spawned yet. There were an especially large number of perch in the 3- to 4-inch size range (probably yearlings). Most of the walleyes taken in trawls were in the 7- to 9-inch range.

A daylight midwater tow at 25 feet over 40-foot bottom east of Kelley's Island produced 840 smelt and 128 emerald shiners. The water in this area was thermally stratified and the fish were taken just over the cold layer. A similar tow west of South Bass Island took only 21 smelt, 5 emerald shiners, and 1 white bass. The water was not stratified in this area. An identical tow after dark at the latter location caught 19 smelt, 195 emerald shiners, 1 perch, and 1 trout-perch. Another midwater tow just 6 feet off the bottom produced a catch similar to previous bottom drags in the area, except that there were many more emerald shiners and noticeably fewer large perch and sheepshead.

Experimental nylon gill nets (mesh sizes 1-, $1\frac{1}{2}$-, 2-, $2\frac{1}{4}$-, $2\frac{1}{2}$, $2\frac{3}{4}$-, 3-, and 4-inch) were set off Kelly's Island in $6\frac{1}{2}$ fathoms. The catch was predominately yellow perch in all meshes except the 4-inch and 1-inch sizes. The 4-inch mesh took mostly sheepshead, the 1-inch primarily smelt. The perch catch in the other meshes was very large; walleyes, white bass, channel catfish, silver chubs, blue pike, burbot, and white sucker were taken in smaller numbers. An oblique gill net

set nearby the same night caught perch, sheepshead, channel catfish, and smelt near the bottom and walleyes, blue pike, white bass, and smelt at midlevels.

A half-meter plankton net towed at night at various depths caught a few smelt fry at the surface, but no other fish. The same net towed in the daytime caught smelt fry at midlevels.

The water off Sandusky was stratified thermally until the end of the cruise when it became homothermous, probably due to the strong winds that prevailed. Surface temperatures ranged from 9.7° to 15.6° C. (About 50°-60° F.)

Note: Scientific names for species mentioned: smelt (Osmerus mordax), sheepshead (Aplodinotus grunniens), yellow perch (Perca flavescens), emerald shiners (Notropis atherinoides), spotted shiners (Netropis hudsonius), trout-perch (Percopsis omiscomaycus), walleyes (Stizostedion vitreum vitreum), channel catfish (Ictalurus lacustris), white bass (Lepibema chrysops), madtoms (Schilbeodes sp.), silver chubs (Hybopsis storerianus), logperch (Percina caprodes), blue pike (Stizostedion vitreum glaucum), burbot (Lota lota), and white sucker (Catostomus commersoni).

Migrants to West Coast Expanding Market for Local Fresh Fish and Shellfish

Newcomers to the West Coast from other states buy at first much less fresh fish or shellfish than the native population--but buy more of these products the longer they stay. Particularly among migrants from the Central or Mountain States who develop a taste for locally-caught fresh fish, the consumption rate moves upward steadily from year to year.

Only about 15 percent of the newcomers bought fresh crab during their first year on the West Coast as against 58 percent of the migrants living there ten years or more. When measured in terms of percentage increase over the first year this amounts to a startling increase of 297 percent. Corresponding percentage increases for fresh fish were sole 153, halibut 93, and salmon 78. Industry leaders are hopeful that educational and promotional work may shorten the taste-forming period for fresh fish.

The survey made by Oregon State College for the United States Fish and Wildlife Service with Saltonstall-Kennedy funds also revealed that among families migrating from inland areas length of residence on the West Coast had little effect upon increasing the low per capita consumption of frozen fish or shellfish.

With the increasing influx of migrants from the prairie and mountain states to California, Oregon, and Washington, this growing market for fresh fish and shellfish is of considerable interest to the Pacific Coast fishing industry. Frozen fish and shellfish, often imported or shipped from areas other than the Pacific Coast, gives the local fisherman plenty of competition. However, the industry has the fresh market on the West Coast largely to itself.

North Atlantic Fishery Investigations

OCEAN PERCH TAGGED IN 1956 RECAPTURED AT EASTPORT, MAINE: During a joint cruise aboard the Canadian Department of Fisheries research vessel Harengus, biologists of the U. S. Fish and Wildlife Service and the Fishery Research Board of Canada recaptured 12 ocean perch that had been tagged by Service biologists in August 1956. The tagged fish were among 60 ocean perch that were caught by hook and line at the original tagging site in Eastport Harbor.

A small otter trawl was used to make a series of tows on the smooth bottom in the Eastport area and the number of each species of fish captured was recorded. Representative samples of fish and invertebrates were preserved at each station. Ocean perch were found to be scarce at all otter trawl stations occupied. Large cod, haddock, pollock, and sea dab were taken in most tows. One station yielded a fair-size catch of sardine herring, and some samples of very small whiting and cod were taken at several stations.

Recapture of tagged ocean perch confirms observations obtained from a study of ocean perch otoliths (ear bones) that this species has a very slow rate of growth. From August 1956 to May 1957 the average rate of growth of the 12 recaptured ocean perch was only 3 millimeters. The recaptured ocean perch mark the first successful attempt to tag this variety in United States waters.

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STUDIES ON DRIFT OF HADDOCK EGGS AND LARVAE CONTINUED (M/V Albatross III Cruises 93 and 94): Haddock, cod, pollock, and hake larvae were abundant over most of the Georges Bank area surveyed during the third (May 8-16) and fourth (May 22-29) of a series of cruises planned to study the relationship between the Georges Bank non-tidal drift and the drift of haddock eggs and larvae.

Approximately 2,400 miles of continuous plankton tows were made at the surface and 10 meters with Hardy Plankton Recorders and 260 Bathythermograph observations were taken; 130 salinity samples were collected; 28 one meter-net surface tows and 50 Heusen egg-net surface tows were made; 1,728 drift bottles and 3 transponding buoys were released; and 5 transponding buoys, previously released, were located. One transponding buoy missing during the April 25-May 2 cruise still could not be located.

Note: See Commercial Fisheries Review, June 1957 p. 29.

Radiation Preservation of Food

The technique of food preservation using atomic energy is based on the use of radiation to destroy organisms which cause food spoilage. Experiments on human food preservation by radiation are being conducted under the direction of the U. S. Army Quartermaster Corps. Radiation undoubtedly will be used in preserving foods for civilian consumption wherever it offers economic advantages which are attractive to the consumer.

However, radiation preservation has limitations. While the radiation sterilization process will kill bacteria, off-flavors and off-odors tend to result from applications large enough to kill all bacteria. Furthermore, the radiation preservation process will probably be used in conjunction with refrigeration, thermal preservation, or other preservation processes. The time scale of development to date indicates that within 5 years radiation preservation of some foods could begin on a practical commercial scale. Widespread commercial use of this technique must await development of cheaper sources of radiation energy and packaging techniques.

Radiation preservation of food does not appear likely to replace other methods of food preservation to any substantial extent in the near future. When the technology has been developed and is economically feasible, this method of food preservation probably will be a supplement to the other methods now available. The potential for small business probably will develop slowly, will be moderate in size and will be in connection with food processing and packaging. (Technical Aids for Small Business No. 52, "Small Business and the Industrial Applications of Atomic Energy," April 1957, issued by the Small Business Administration.)

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U. S. Foreign Trade

IMPORTS OF CANNED TUNA IN BRINE UNDER QUOTA PROVISO: The quantity of tuna canned in brine which may be imported into the United States during the calendar year 1957 at the 12½-percent rate of duty is limited to 44,528,533 pounds. Any imports in excess of that quantity will be dutiable at 25 percent ad valorem.

Imports under the quota from January 1-May 4, 1957, amounted to 12,540,107 pounds, according to data compiled by the Bureau of the Customs. This leaves a balance of 31,988,426 pounds of the quota which may be imported during the balance of 1957 at the 12½-percent rate of duty.

* * * * *

EDIBLE FISHERY PRODUCTS, MARCH 1957: United States imports of edible fresh, frozen, and processed fish and shellfish in March 1957 were higher by 23.2 percent in quantity and 27.8 percent in value as compared with the previous month. Compared with March 1956, the imports for March this year were up 8.0 percent in quantity and 15.4 percent in value. Imports for March 1957 averaged 29.8 cents a pound as compared with 27.9 cents a pound for the same month in 1956.

Table 1 - United States Foreign Trade in Edible Fishery Products, March 1957 with Comparisons

Item	Quantity			Value		
	March		Year	March		Year
	1957	1956	1956	1957	1956	1956
	(Millions of Lbs.)			(Millions of $)		
Imports:						
Fish & shellfish:						
Fresh, frozen & processed 1/	67.8	62.8	786.5	20.5	17.5	231.
Exports:						
Fish & shellfish:						
Processed 1/ only (excluding fresh & frozen)	7.9	6.3	82.8	1.4	1.3	19.

1/ INCLUDES PASTES, SAUCES, CLAM CHOWDER AND JUICE, AND OTHER SPECIALTIES.

March 1957 imports increased as compared with February due to heavier imports of all types of fillets, shrimp, and canned fish. Comparisons this March with the same month in 1956 indicate an increase of about 11.6 percent in fillets and a 47-percent increase in canned tuna.

Exports of processed edible fish and shellfish in March 1957 decreased about 5.1 percent in quantity as compared with the previous month, but were 25.3 percent above March 1956. The March 1957 value of these exports was lower by 17.1 percent as compared with the previous month, but higher by 7.7 percent from the same month a year ago. The increase this March in quantity of 25.3 percent and only 7.7 percent in value as compared with a year earlier may be attributed to greater exports of low-value canned Pacific mackerel.

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GROUNDFISH FILLET IMPORTS, MAY 1957: Imports of groundfish and ocean perch fillets and blocks in May 1957 amounted to 8.7 million pounds. Compared with the same month last year, this was an increase of 1.2 million pounds or 16 percent. The principal cause for this gain was a 2.0-million-pound increase in imports from Canada and Denmark. During May 1957 there were 271,000 pounds of groundfish fillets imported from the United Kingdom and 82,000 pounds from

Miquelon and St. Pierre, while there were none from either of these two countries during the corresponding month last year. Icelandic groundfish fillet exports to the United States during May 1957 were down 450,000 pounds as compared with exports reported for the preceding May. There were smaller imports from Norway and the Netherlands, while there were none from France, West Germany, and Greenland.

Imports of groundfish and ocean perch fillets and blocks into the United States during the first five months of 1957 totaled 56.3 million pounds--a decrease of 2.6 million pounds or 4 percent as compared with the same period of the previous year. Canada led all other countries exporting fillets to this country during 1957 with 41.8 million pounds, followed by Iceland with 10.1 million pounds. These two countries accounted for 92 percent of the total imports for the five-month period of 1957.

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IMPORTS AND EXPORTS OF SELECTED FISHERY PRODUCTS, MARCH 1957:
Imports: GROUNDFISH: Fillet imports of 6.3 million pounds during March were 7 percent more than in the same month of 1956. Imports of fillet blocks and slabs in March totaled 3.2 million pounds, up 14 percent from the same month a year ago.

Total imports of all groundfish fillets amounted to 34.8 million pounds in the first three months of 1957, about the same quantity as imported during that period of 1956. Of that total, Canada supplied 24.0 million pounds and Iceland 7.5 million pounds.

FROZEN TUNA: March imports were down 2 percent less than in the same month of 1956. The total for the year through March of 36.7 million pounds was 10 percent larger than during the similar 1956 period--albacore imports were up 38 percent; yellowfin and skipjack imports were down 4 percent.

CANNED TUNA: Imports of 4.5 million pounds during March were 47 percent larger than in March 1956. Imports during the first three months of 1957 were 13 percent above January-March 1956.

CANNED BONITO: March imports were down 28 percent from March 1956. The total for the first three months of 1957 dropped 10 percent below the same period in 1956--brine-pack imports were up 36 percent; oil-pack imports were down 23 percent.

CANNED SALMON: A million pounds were imported during March, 9 percent less than in the same month a year earlier. Total imports through March this year were 3 percent below a year ago. Japan was practically the sole supplier during 1957.

CANNED SARDINE: March imports totaled 2.1 million pounds, 38 percent greater than in March 1956. Total imports for the year through March were up 11 percent from a year ago.

SWORDFISH: About 2 million pounds were imported during March, a 13-percent gain over that month a year ago. Total imports for the first three months of 1957 were 4.4 million pounds, 2 percent less than during the same period a year ago.

SHRIMP: March imports of 5.5 million pounds were 9 percent greater than a year ago. The total for January-March of 15.4 million pounds was 22 percent less than that period of 1956. Imports from Mexico this year were 36 percent less than during the first three months of a year ago.

LOBSTERS: Imports of 3.9 million pounds during March were about the same as those of that month in 1956. January-March imports of 12.7 million pounds were 23 percent greater than a year earlier.

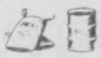
CANNED CRABMEAT: Imports of 1 million pounds in the first three months of the year were 14 percent less than during the same period of 1957. March imports of 543,000 pounds were 32 percent greater than in March 1956.

FISH MEAL: Imports of 13,326 tons during March were 55 percent greater than in March 1956. January-March imports of 22,631 tons were 18 percent less than the previous year.

Exports: CANNED SARDINES: Very little change in export trend with March exports of 1.8 million pounds--a decline of 64 percent from the same period a ye earlier. Total exports of 6.4 million pounds for the first three months of 1957 al were down 64 percent from the same period a year earlier. Principal decline oc curred in exports to the Philippines.

CANNED MACKEREL: March exports amounted to 4.3 million pounds, large destined for the Philippines. Exports during the first three months of the year to taled 9.4 million pounds, about 4 times the quantity exported during all of 1956.

FISH OILS: March exports were up 11 percent to 15 million pounds, but the totalf the year through March of 35.3 million pounds was 4 percent less than a year earlier.



Wholesale Prices, May 1957

The usual seasonal increase in landings of fish and shellfish which takes plac in May was responsible for the 2.2 percent decline in the over-all edible fish and

Table 1 - Wholesale Average Prices and Indexes for Edible Fish and Shellfish, May 1957 With Comparisons

Group, Subgroup, and Item Specification	Point of Pricing	Unit	Avg. Prices1/ ($)		Indexes (1947-49=100)			
			May 1957	Apr. 1957	May 1957	Apr. 1957	Mar. 1957	May 1956
ALL FISH & SHELLFISH (Fresh, Frozen, & Canned)					117.0	2/119.4	119.4	111.
Fresh & Frozen Fishery Products:					128.2	2/132.2	132.0	120.
Drawn, Dressed, or Whole Finfish:					107.9	2/120.0	123.4	113.
Haddock, lge., offshore, drawn, fresh	Boston	lb.	.08	.11	77.4	111.0	100.5	70.
Halibut, West., 20/80 lbs., drsd., fresh or froz.	New York	lb.	.29	.30	89.0	92.3	95.9	123.
Salmon, king, lge. & med., drsd., fresh or froz.	New York	lb.	.65	.60	145.2	134.8	139.8	140.
Whitefish,L. Superior, drawn, fresh	Chicago	lb.	.67	.92	166.1	2/229.3	195.8	153.
Whitefish,L. Erie pound or gill net, rnd., fresh	New York	lb.	.80	1.12	161.8	227.5	182.0	148.
Lake trout, domestic, No. 1, drawn, fresh	Chicago	lb.	.52	.80	106.5	163.9	161.8	104.
Yellow pike, L. Michigan & Huron, rnd., fresh	New York	lb.	.35	.32	82.1	75.0	173.5	68.
Processed,Fresh (Fish & Shellfish):					143.2	140.4	142.7	126.
Fillets, haddock, sml., skins on, 20-lb. tins	Boston	lb.	.32	.36	108.9	120.8	117.4	91.
Shrimp, lge. (26-30 count), headless, fresh	New York	lb.	.96	.91	151.7	143.8	143.8	124.
Oysters, shucked, standards	Norfolk	gal.	5.75	5.75	142.3	142.3	148.5	136.
Processed, Frozen (Fish & Shellfish):					130.9	130.9	120.1	115.
Fillets: Flounder, skinless, 1-lb. pkg.	Boston	lb.	.40	.40	103.4	103.4	103.4	103.
Haddock, sml.,skins on, 1-lb. pkg.	Boston	lb.	.30	.30	92.6	92.6	87.9	91.
Ocean perch, skins on, 1-lb. pkg.	Boston	lb.	.29	.29	114.8	114.8	114.8	114.
Shrimp, lge. (26-30 count), 5-lb. pkg.	Chicago	lb.	.94	.94	145.8	145.8	128.9	118.
Canned Fishery Products:					101.2	101.2	101.5	99.
Salmon, pink, No.1 tall (16 oz.), 48 cans/cs.	Seattle	cs.	22.65	22.65	120.0	120.0	120.0	120.
Tuna, lt. meat, chunk, No. 1/2 tuna (6-1/2 oz.), 48 cans/cs.	Los Angeles	cs.	11.20	11.20	80.8	80.8	80.8	76.
Sardines, Calif., tom. pack,No. 1 oval (15 oz.), 48 cans/cs.	Los Angeles	cs.	9.00	9.00	105.0	105.0	105.0	87.
Sardines, Maine, keyless oil, No. 1/4 drawn (3-1/4 oz.), 100 cans/cs.	New York	cs.	7.70	7.70	81.9	81.9	84.6	89.

1/Represent average prices for one day (Monday or Tuesday) during the week in which the 15th of the month occurs. These prices are published as indicators of movement and not necessarily absolute level. Daily Market News Service "Fishery Products Reports" should be referred to for actual prices.

2/ Revised.

shellfish (fresh, frozen, and canned) wholesale index (117.0 percent of the 1947-49 average) from April to May 1957. But the May index was 4.7 percent higher than for the same month in 1956.

Lower prices for fresh large offshore haddock at Boston, frozen dressed Western halibut at New York City, and fresh-water fish accounted for the drop of 9.6 percent in the drawn, dressed, or whole finfish subgroup index from April to May. Only salmon was priced higher because supplies were light. Compared with the same month in 1956, the May subgroup index was down 4.8 percent principally because frozen dressed halibut prices were down 28.1 percent and more than offset the substantially higher prices for the other fish.

Fresh processed fish and shellfish prices in May were 2.0 percent higher than the previous month because the drop of 9.9 percent in the fresh haddock fillet prices at Boston was more than offset by a 5.5-percent rise in the fresh shrimp prices at New York City. Light supplies and good demand continued to strengthen the shrimp market. All fresh processed fish and shellfish prices in May were substantially higher (13.6 percent) than in the same month a year earlier.

There was no change in the prices for frozen processed fish and shellfish from April to May. However, this subgroup index in May was 13.6 percent higher than in May 1956 because of slightly higher prices for frozen haddock fillets at Boston and substantially higher prices for frozen shrimp at Chicago. Frozen shrimp inventories were lighter and demand was better this May than in the same month of 1956.

Canned fishery products prices in May remained at the April level. But this subgroup index was 2.2 percent higher than in the same month of 1956 because of higher tuna prices and substantially higher canned California sardines which have practically disappeared from the market. Canned Maine sardine prices this May were slightly lower than in May 1956.

World Markets for United States Fishery Products in 1956

Foreign markets bought less fishery products from the United States in 1956 than during the previous year, but this trade was still substantially larger than in 1950. Further liberalization in the trade restrictions applied by certain countries to fishery products from the United States was evident. Restrictions applied by countries in balance-of-payments difficulties have severely limited exports of fishery products since 1948. The United States fishery industries depend on foreign market outlets for many products.

More than 325 million pounds of edible and industrial fishery products (including fish oils and shell products) were shipped to foreign countries during 1956, according to a review of the United States fishery export trade made by the Bureau of Commercial Fisheries. These products were valued at $38.5 million. During 1955, 336 million pounds were exported, valued at nearly $40.0 million. The 1950 export trade totaled 264 million pounds, valued at $27.4 million (see table 1).

The decline in the 1956 trade was due for the most part to reduced exports of canned fish, particularly canned salmon and sardines. Fish oil and unmanufactured shell exports also declined slightly, but the export value for these products showed an increase over 1955 because of higher prices.

Canada in recent years has been the leading export market from the standpoint of value of trade (see table 2). In 1956 the total value of United States fishery products shipments to that country of $8 million were $2 million less than the $10 million

reports in 1955. In 1950 those exports were valued at only $3 million. The value of canned sardine, salmon, and fish oil exports to Canada in 1956 declined, but the

Table 1 - United States Exports of Fishery Products, 1950, 1955, and 1956

Commodity	Quantity 1/			Value		
	1956 1/	1955	1950	1956	1955	1950
	(1,000 Lbs.)			($1,000)		
Fish:						
Fresh or frozen	15,741	15,273	4,227	1,958	1,287	324
Canned	62,811	71,377	108,015	13,415	16,877	15,356
Cured	889	1,171	945	477	491	254
Other	293	250	64	135	121	27
Total	79,734	88,071	113,251	15,985	18,776	15,961
Shellfish:						
Fresh or frozen	3,354	3,443	2,169	2,186	1,986	953
Canned	18,755	17,759	5,735	4,682	3,946	1,655
Cured	74	477	469	86	215	287
Total	22,183	21,679	8,373	6,954	6,147	2,895
Total Edible Products	101,917	109,750	121,624	22,939	24,923	18,856
Fish and Fish-liver oil	140,804	142,671	75,974	12,883	11,852	7,137
Oysters & other shell for feed	69,276	70,372	62,000	523	464	441
Shell, unmanufactured	10,140	13,051	4,026	821	783	205

1/ PRELIMINARY

value of exports of fresh and frozen fish, oysters, shrimp, and clams increased over 1955. The value of exports of canned shrimp, canned oysters, fur-seal skins, and oyster and other shells for feed also increased.

The Philippines took products valued at slightly over $8 million, largely canned California sardines valued at $4 million and canned California anchovies valued at about $2.5 million. Canned squid was another important export to the Philippines in 1956 with this trade valued at about $1 million. Trade with the Philippines was valued at $8.6 million during 1955 and $6.4 million in 1950. In 1950, the trade was principally in canned sardines.

West Germany, the principal market for United States fish oils, took directly products valued at $6.1 million during 1956, and is believed to be the ultimate destination for a large part of the exports of fish oils to the Netherlands valued at $4.4 million. In addition to fish oils, the West German market took salted salmon, fur-seal skins, pearl essence, and unmanufactured shells.

Table 2 - Value of United States Exports of Fishery Products, by Principal Country of Destination, 1950, 1955, and 1956

Country	1956 1/	1955	1950
		($1,000)	
All Countries	39,480	39,977	27,462
Canada	7,990	10,038	3,042
Philippines	8,058	8,558	6,427
West Germany	6,118	1,905	883
Netherlands	4,956	7,196	4,347
United Kingdom	2,204	3,706	67
Norway	1,065	991	-
Belgium and Luxembourg	574	716	1,154
France	431	206	67

1/ PRELIMINARY

Aside from fish oils, the Netherlands was a relatively small but increasing market for frozen and canned salmon, and shrimp from the United States. Total trade with the Netherlands was valued at $4.9 million in 1956 as compared to $7.2 million in 1955 and $4.3 for 1950.

The United Kingdom took products valued at $2.2 million during 1956, a decline of 41 percent from the $3.7 million of 1955, due to the reduction in canned salmon imports. The United Kingdom was the principal United States market for frozen and canned fish in the prewar and wartime period. Since 1949, exports to this important market practically stopped due to restrictions on imports of fishery products from the United States resulting from balance-of-payments problems. It is

believed that many fishery products could again be readily marketed in the United Kingdom if the restrictions on these imports from the United States were lifted.

Norway, normally considered a primary fish exporter, bought fish oils from the United States valued at $1 million during 1956. Belgium and Luxembourg purchased products valued at $574,000, a slight decline from $716,000 in 1955, and considerably below purchases in 1950 valued at $1,154,000. The main decline from 1950 was in exports of canned California sardines. Exports to France were valued at $431,000 as compared with $206,000 in 1955 and $67,000 in 1950, principally due to larger exports of frozen salmon.

Exports to Latin American countries have decreased since 1950 as a result of reduced shipments of canned California sardines. However, the area remains a very important market for canned fish. Exports to the Latin American area during 1956 were valued at $3.6 million.

Canned salmon, the most widely-distributed fishery commodity, was exported to 60 countries. Canned sardines went to 49 countries, canned tuna to 30, canned shrimp to 42, canned oysters to 15, canned crab to 11, and canned mackerel to 8 countries. Fish oils were exported to 22 countries, fur-seal skins to 11 countries, pearl essence to 19, and unmanufactured shell to 18. Mild-cured salmon went to 12 countries and dried shrimp to 11. Frozen salmon was exported to 16 countries and frozen shrimp to 28.

Exports of fresh and frozen fish and shellfish from the United States exports amounted to 19 million pounds during 1956, about three times the 1950 exports of over 6.4 million pounds. Of the 1956 total, about 90 percent was exported to Canada.

Exports of canned fish and shellfish in 1956 were considerably below those of 1950, due for the most part to reduced exports of canned California sardines. Canned shellfish exports have increased threefold both in quantity and in value since 1950. Canned salmon exports declined from 10.4 million pounds in 1955 to 5.2 million pounds in 1956 as a result of smaller shipments to Canada and the United Kingdom. The 1956 canned sardine exports dropped to 39.7 million pounds (due to a smaller supply of this fish in the United States), the bulk of which went to the Philippines along with about 15.6 million pounds of canned anchovies. The Latin American market was another important market for canned sardines and mackerel. Canned shrimp exports of 2.4 million pounds in 1956 went principally to Canada. Exports of canned squid (produced in California) totaled about 16 million pounds, of which the larger portion went to the Philippines and some quantities to Greece.

Exports of cured fish and shellfish totaled less than 1 million pounds in 1956, and have declined since 1950. Exports of mild-cured salmon increased while other products such as salted cod and haddock, and dried shrimp have decreased. Gains in mild-cured salmon resulted from increased shipments to Sweden and other Western European countries since 1950. A sharp decline in exports of dried shrimp to Cuba and Panama was responsible for the decline in exports of this product.

Exports of industrial fishery products from the United States were valued at $16.6 million during 1956, of which fish and whale oil made up $13 million. Also of significance in this field were exports of fur-seal skins, valued at $1.6 million, almost four times those of 1950. Exports of oyster and other shells for feed were valued at $523,000 in 1956, up somewhat from 1950 and 1955. Pearl-essence exports amounted to $355,000. Unmanufactured shells valued at $821,000 were exported during 1956, about four times the value of 1950, principally shipped to Japan (6.4 million pounds), Belgium (2.5 million pounds), and Canada (1.8 million pounds).