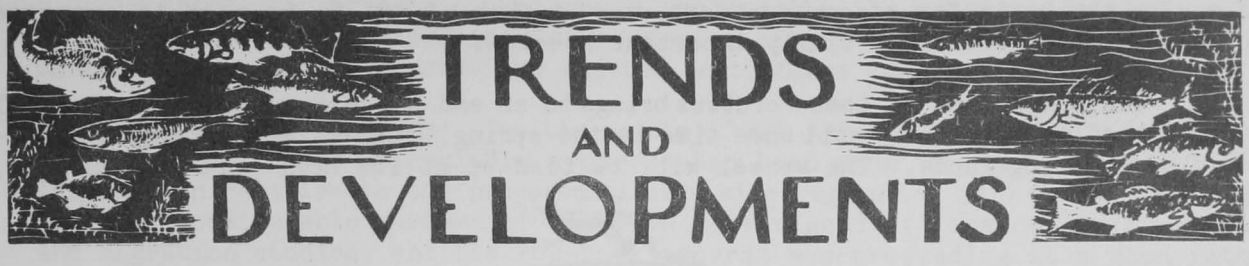


Additions to the Fleet of U. S. Fishing Vessels

A total of 49 vessels of five net tons and over received their first documents as fishing craft during December--6 less than the previous month and 15 less than in December 1947, according to the Bureau of Customs of the Treasury Department. Louisiana and Florida led with 9 vessels each, while 7 vessels obtained documents in Washington. A total of 1,183 vessels received their first documents as fishing craft during 1948 compared with 1,300 during 1947. The South Atlantic and Gulf area led with 541 vessels in 1948 followed by the Pacific Coast area with 347 vessels.

Vessels Obtaining Their First Documents as Fishing Craft, December 1948

Section	December		Year	
	1948	1947 1/	1948	1947 1/
	Number	Number	Number	Number
New England	3	5	52	55
Middle Atlantic	-	3	40	64
Chesapeake Bay	3	7	59	83
S. Atlantic & Gulf	30	34	541	486
Pacific Coast	11	14	347	415
Great Lakes	5	3	51	45
Alaska	4	6	81	123
Hawaii	3	2	12	28
Puerto Rico	-	-	-	1
Total	59	74	1,183	1,300

1/ Revised.
Note: Vessels have been assigned to the various sections on the basis of their home port.

Vessels Obtaining Their First Documents as Fishing Craft, 1936 to 1948, Inclusive

Year	Number	Year	Number
1936*	435	1943	358
1937	335	1944	635
1938*	376	1945	741
1939	357	1946	1,085
1940	320	1947	1,300
1941	354	1948	1,183
1942	358		

*Data are partly estimated.

Albatross III

FURTHER INVESTIGATIONS ON USE OF LARGER MESH NETS: The work of the Albatross III, on Cruises 15 and 16, January 10-13 and 17-19, 1949, was to investigate further the use of larger mesh nets or savings gear. The double trouser trawl was used on all the tows in this series. This net is an adaptation of a 1½ Iceland trawl and has four regular-sized cod ends in place of the one in an ordinary net. During these cruises, two cod ends of regular commercial mesh and two cod ends of 4¼-inch savings mesh were used.

Data on the number of fish entering each of the four cod ends and the size of the fish of all species in each bag were obtained by the investigating scientists. These data and those from future experiments will be used to determine the size and number of fish of the various kinds which escape through the net and

may be the basis for recommendations on the size of net to be used to conserve young fish of the commercially-important species.

The completion of these cruises brings to an end the work of the Albatross III for about four months, until some time in the spring, due to the shortage of available operating funds. The vessel will be tied up at its home port--Woods Hole, Mass.

Consolidation of Education and Market Development Sections

Effective February 14, the Education Section and the Market Development Section of the Branch of Commercial Fisheries were combined into one section. This section will carry on the duties and functions of both Sections and will be called, tentatively, the Education and Market Development Section.

The Sections were combined in order to conduct fishery educational and market development work more effectively, eliminate any possibility of duplication, make better use of the funds available in view of increased operating costs, and eliminate some confusion in the minds of the industry and others as to the difference between the activities of the two Sections. At an advisory meeting in the fall of 1948, it was suggested by a group of industry representatives that combining the two Sections be considered.

With the two Sections united, it appears that a better distribution of personnel can be obtained and there will be closer contact with the fisheries outside of Washington. It is also expected that all activities conducted will be benefited through closer coordination.

The new Section will be headed by Donald Y. Aska, formerly Chief of the Education Section. His assistant chief will be Arthur M. Sandberg, formerly occupying the same position in the Market Development Section. Ralph Russell, former Chief of the latter Section, is being assigned a specific field of activity in the new Section. He will be responsible primarily for Quarterly Marketing Outlook reports and similar reports issued on a monthly basis. This type of information is of considerable importance to the fisheries and is frequently requested by trade associations, Government agencies, fishery enterprises, and allied interests, such as banks and other financial institutions. Heretofore, this information has been supplied in part by the Statistical, Market News, and Economics Sections. Hereafter, a Marketing Outlook Report, combining marketing information from the three Sections mentioned, as well as the new Section, will be prepared each quarter by Mr. Russell. Other units in the new Section will continue the program adopted for the current fiscal year.

Discussions and Resolutions of Pacific Marine Fisheries Commission

MEETING HELD AUGUST 17-18, 1948: At a meeting of the Pacific Marine Fisheries Commission held August 17-18, 1948, at Bellingham, Wash., discussions took place and resolutions were passed regarding sardines, otter-trawl fisheries, tuna, salmon,

soupfin shark, and effects of water-use projects on the conservation and maintenance of the anadromous fisheries resources of the Pacific Coast. Summaries of the more important discussions and the resolutions adopted follow:

Otter-Trawl Fisheries: The biologists of the three States and British Columbia reported that no appreciable progress had been made in securing additional information relative to the proposed minimum size regulation of 5 inches for otter trawls. Considerable numbers of flatfish were tagged off the coast for racial and migration studies, and the log-book program was proceeding at a good rate. The concensus of all present was that it would be difficult to propose any concrete recommendations based on the limited amount of data available.

The Commission passed the following resolution in regards to the otter-trawl fishery:

> That the biologists working on the trawl fishery continue their studies in the respective States and be prepared to give a progress report at the next meeting, also specific recommendations, if any are in order.

Salmon: Following a discussion on the offshore salmon problems, the following recommendations on salmon were agreed to by all present:

> That for the present, the Commission was not in a position to offer any definite recommendations. The technical staffs were instructed to continue their investigation and to hold a conference to which Canadian and Alaska representatives should be invited to discuss the offshore salmon fishery, including purse seining, of the entire Coast.

Sardines: A report on the meeting of the sardine biologists held in San Francisco in the early summer of 1948 was presented. The biologists, according to the report, were unanimous in their opinion that management of the pilchard fishery along the Pacific Coast should be started at the very earliest possible time, and it was agreed that controlling the total take would be the best method. The amount of quota to be set for the coming lean years was recommended at between 50,000 and 100,000 tons, with the majority stating that a quota of 50,000 tons might be necessary at the start to get the pilchard industry back on the upgrade. The allocation of the quota was to be 90 percent to California and the other 10 percent to Oregon, Washington, and British Columbia.

The following resolution on the sardine report was passed by the Commission as a whole:

> That the sardine report submitted for the biologists be received without approving or disapproving, that its subject matter be submitted to the advisory committees of the three States and the British Columbia authorities and industry for formal action and these groups to report back at the next Commission meeting with definite suggestions. Also as a matter of general information, but not to be acted upon formally, the report be submitted to the Fish and Wildlife Service, the Scripps Oceanographic Institute and any other interested agencies as the chairman may determine.

Soupfin Shark: After the presentation of reports and recommendations by the three States, as requested at the previous meeting of the Commission, and following a discussion, the following resolution was unanimously adopted in regards to the soupfin shark fishery:

That the Commission go on record to the effect that it believes the depletion of the soupfin shark resources has proceeded past the danger point, that management is necessary immediately, and that the following minimum regulations are necessary:

1. Protection be given the soupfin shark on the nursery grounds;

2. "Diver" nets be prohibited following a time interval for the using up of those nets now in possession or operation;

3. Serious consideration be given to the prohibition of drift-nets, or at the very least the minimum mesh sizes be increased;

That the details of these proposed regulations be worked out by the research staffs and the industry advisory committees well in advance of the date of the next Commission meeting;

That at the next Commission meeting this matter and concurrent proposals be prepared for presentation to the three States; and

That representations be made to the proper Canadian and Mexican authorities by this Commission to ascertain their feelings on the subject.

Tuna: After a discussion that followed the presentation of reports on the work done by the various States represented in regards to the tuna fisheries, the Commission unanimously adopted the following resolution:

WHEREAS, There is a small amount of money available for the research activities of the three Pacific Coast States in the albacore and tuna fisheries, and WHEREAS, Proper research requires a survey of almost all the North Pacific area and none of the States can justify an expenditure adequate to so broad a field of research, and WHEREAS, a start must be made in the proper direction in the matter of this important fishery; Now, Therefore be it Resolved, That this Commission recommend to the several States signatory to the Pacific Fisheries Compact and to their proper fisheries bodies that the first matter for research for which the money allocated for tuna fishery research be expended shall be the question of whether or not the Albacore of the North Pacific is one population, And Be it further resolved, That this Commission go on record requesting the Congress of the United States to extend the provisions of the Farrington Act to enable the Fish and Wildlife Service to extend their research into areas in which the albacore are abundant to enable this matter, as well as other matters of importance to the albacore fishery, to be correlated and carried on with adequate staff and adequate physical property.

Effects of Water-Use Projects on Fisheries: In regards to the effects of water-use projects on the conservation and maintenance of the anadromous fisheries resources of the Pacific Coast, the Commission unanimously adopted the following resolution:

WHEREAS, The Pacific Marine Fisheries Commission is composed of the official representatives and agencies of the States of California, Oregon and Washington, charged and concerned with the conservation and regulation of the marine and anadromous fishes of the Pacific Coast States, and

WHEREAS, This Commission is vitally concerned with and actively studying the effects of various water-use projects on the conservation and maintenance of the anadromous fisheries resources of the Pacific Coast States, and

> WHEREAS, At the present time it is the policy of the Corps of Engineers and the Bureau of Reclamation to make public statements to the effect that the fisheries resources will not be adversely affected by the proposed multiple water-use projects in spite of a complete lack of knowledge regarding the subject by these construction agencies; Now
>
> THEREFORE BE IT RESOLVED, That the Pacific Marine Fisheries Commission requests both of these Federal agencies to desist from making premature statements regarding the success of fish salvage programs, since it is the prerogative of the properly constituted fisheries authorities to make the decisions regarding the effects of the individual projects on the maintenance and successful salvage of the anadromous fisheries resources involved.

MEETING HELD DECEMBER 7-8, 1948: A meeting of the Pacific Marine Fisheries Commission was held on December 7-8, 1948, at Portland, Ore. The following is a summary of some of the discussions and of the resolutions adopted:

Salmon: Following a discussion that followed the presentation of reports on the troll salmon fishery, the Commission made the following resolution:

> That no chinook salmon less than 26 inches in length be taken by trollers; that no chinook salmon be taken by other forms of gear; that the chinook salmon season be from March 15 to December 31; that any State may declare a shorter season within the dates specified above; and
>
> Further, that a silver salmon open season be established from June 15 to October 31.

No size limit was recommended on silvers. A proposal for a 22-inch limit was dropped.

Soupfin Shark: After a discussion of the soupfin shark problem, the Commission adopted the following recommendations:

> The issuance of revokable licenses to boat operators, processors and all others engaged in the soupfin shark fishery; prohibiting the sale of female livers and providing that evidence of sex be retained with each liver; abolishing fishing within a 25-fathom curve; establishment of a minimum 9.5-inch mesh size for nets; and that a uniform tagging system be submitted.

The above proposed regulations were to be submitted to the legislature of all three Pacific Coast States in January 1949.

ECA Procurement Authorizations for Fishery Products

During February 1949, the Economic Cooperation Administration announced, among the procurement authorizations for commodities and raw materials, a total of only $415,000 for the purchase of fishery products.

In addition, ECA announced, during February, several cancellations of procurement authorizations for salt fish due to a shortage of this product, and the inability of the countries involved to complete delivery within the time limit.

The cancellations included two authorizations totaling $1,655,000 for the purchase of salt fish in Newfoundland and two totaling $575,000 for the purchase of salt fish in Canada. Both of these purchases were for delivery to Italy during the Fourth Quarter 1948 and the First Quarter 1949.

On February 8, the ECA announced a reduction of $133,000 in an authorization of $814,000 announced on November 4, 1948, for the purchase of whale oil in the United States for delivery to Netherlands during the Fourth Quarter 1948. This reduction does not represent a decrease in tonnage required, but rather a decrease in the value of the tonnage authorized for purchase.

ECA Procurement Authorizations for Fishery Products, February 1949

Product	Country of Origin	Procuring Agency 1/	Recipient Country	Amount Authorized
Fish, canned 2/	U.S.& Possessions	Italy	Italy	$ 400,000
Oil, fish	U.S.	France	French Zone Germany	15,000

Total ECA Procurement Authorizations for Fishery Products, April 1-February 28, 1949

Fish, canned	U.S.	Greece & Italy	Greece & Italy	1,078,000
Fish, salted	Newf. & Canada	Italy & Fr. W. Indies	Italy & Fr. W. Indies	5,179,000
Fish meal	Canada, Iceland, Norway & Angola	Denmark, Austria, & U.S.Dept.Army	Denmark, Austria, & Bizonia	3,457,361
Oil, herring	Iceland	U.S.Dept.Army	Bizone Germany	1,694,000
" , seal	Newfoundland	France	France	257,600
" , shark liver	Latin America except Argentine & Brazil	France	France	250,000
" , fish	U.S.	France	Fr.Zone of Germany	15,000
" , technical fish	U.S.	U.S.Dept.Army	Bizone Germany	100,000
" , whale	Netherlands, Belgium, Norway & U.S.	Austria & U.S. Dept. Army	Austria & Bizone Germany	7,059,150
Vit.A (Commercial Grade, for stock feed)	U.S.	Netherlands	Netherlands	567,000
Grand Total Authorized				19,657,911

1/Where the recipient country is shown as the procuring agency, the Government of the participating country or its authorized agents or importers do the purchasing.
2/Except salmon and tuna.

The total amount authorized to date for purchases in the United States and possessions is $2,041,800.

Experimental Truck Shipment--Seattle to Chicago

For the first time in the history of the Chicago Wholesale Fish Market, so far as a search of the records discloses, motor-truck transportation of fishery products from the Pacific Coast to Chicago was attempted. Early in February, the first truck shipment from Seattle, Wash., consisting of two trucks carrying 40,000 pounds of frozen halibut and salmon, arrived in Chicago, Ill.

The receiver reported that the shipment arrived in top condition and no re-icing was necessary en route. The temperature inside the truck when it left Seattle was 0° F. and it was 10° F. on the morning of the seventh day upon arrival in Chicago.

The shipment was made to determine the feasibility of this method of transportation for fishery products from the West Coast to Chicago. Drivers of the vehicles stated that greater loads than those handled on this experimental trip could be hauled, and that re-icing would not be necessary even during the summer when temperatures were high.

It was claimed by the receiver that there was a small saving realized in actual transportation costs, and an important saving in re-icing charges.

Federal Purchases of Fishery Products

DEPARTMENT OF THE ARMY, December 1948: The Army Quartermaster Corps during December 1948 purchased 1,262,459 pounds of fresh and frozen fishery products valued at $479,668 for the U. S. Army, Navy, Marine Corps, and Air Force for military feeding.

The revised total purchases for the year 1948 amounted to 16,495,000 pounds valued at $5,957,000, compared with 14,058,349 pounds valued at $4,327,431 in 1947.

Hearing on Increases of Express Ice Charges for Fish

The hearing on increases in the ice charges for fish and shellfish filed by the Railway Express Agency in ICC-I & S No. 5612 has been postponed. The Interstate Commerce Commission announced on February 17 that the hearing will be held on April 20, 1949, at Chicago, Ill., instead of March 29, the date previously scheduled.

Herring Fishery at Stonington, Connecticut

The fishing fleet at Stonington, Conn., in December 1947, discovered that they could drag fairly close to port and catch enough herring to make it financially feasible, according to the Service's Fishery Marketing Specialist conducting the Connecticut State survey. During the months of January and February, 1948, the fleet fished for herring almost exclusively. Dealers were buying the herring and trucking it to canners as far south as Maryland. There were at least three canneries packing herring at that time. However, in December 1948, only one cannery was interested, and that one limited the amount it would take.

Because of a lack of demand and a break in the price, some herring trips were dumped late in 1948 and early in 1949.

Imports of Certain Fishery Products, 1948

U. S. Imports of Fresh & Frozen Tuna, 1948, by Countries	
Country	Pounds
Canada	220,343
Mexico	1,984,146
Costa Rica	3,058,378
Ecuador	1,003,000
Peru	484,786
Japan	2,391,911
Total	9,142,564

During the first four months of the year, canned bonito and yellowtail imports were included under "canned tuna," but for the balance of the year, the imports of bonito and yellowtail were shown separately, and totaled 270,708 pounds, or approximately 12,891 standard cases.

FRESH AND FROZEN TUNA: The imports of fresh and frozen tuna into the United States during 1948 amounted to 9,142,564 pounds. Tuna imports from Mexico, Costa Rica, and Ecuador included fish taken by American vessels, unloaded in these countries, and later shipped to the United States. The imports from Peru were entered during the last four months of the year, while those from Japan were for the months of July, August, September, November, and December.

CANNED TUNA, BONITO, AND YELLOWTAIL: The imports of canned tuna into the United States during 1948 amounted to 8,288,442 pounds, or the equivalent of 385,164 standard cases (48 ½-pound cans). The four leading exporting countries were Peru, Portugal, Japan, and Angola (Portuguese West Africa).

United States Imports Canned Tuna, Bonito, and Yellowtail, 1948, by Countries		
Country	Canned Tuna	Bonito & Yellowtail
	Lbs.	Lbs.
Canada	7,546	-
Peru	4,681,435	225,389
Chile	10,382	39,000
Canal Zone	4,815	-
Azores	278,239	-
Portugal	1,842,059	-
Spain	15,079	-
France	11,231	-
Italy	50,403	-
Turkey	-	6,287
Fr. Morocco	6,059	-
Algeria	230	-
Libya	1,034	-
Br. East Africa	53,163	-
Port Guinea	57,160	-
Angola	592,308	-
U. of S. Africa	15,496	-
Japan	545,423	-
China	16,380	32
Total	8,288,442 1/	270,708 1/

1/ During Jan.-Apr., canned bonito and yellowtail imports were included in "canned tuna."

SHRIMP FROM MEXICO: The imports of shrimp from Mexico during 1948 broke all previous records with a total of 21,477,390 pounds, or over 8,000,000 pounds greater than 1947 when the imports amounted to 13,228,505 pounds. Of this amount, 6,149,846 pounds entered through ports in the South Atlantic and Gulf States and presumably came from the shrimp-fishing areas of the Gulf of Mexico, especially in the Bay of Campeche. Undoubtedly, some of the shrimp reported as entering Chicago and New York may also have come from this area.

Imports of Shrimp from Mexico by Customs Districts, 1947 and 1948

Customs District	1948	1947	Customs District	1948	1947
	Lbs.	Lbs.		Lbs.	Lbs.
New York	25,938	25,280	El Paso	416	836
Georgia	25,600	-	Arizona	12,968,022	11,169,218
South Carolina	18,400	-	San Diego	618,460	326,325
Florida	1,271,479	146,323	Los Angeles	777,390	55,287
Mobile	-	44,842	San Francisco	77,750	-
New Orleans	1,434,526	215,971	Oregon	1,980	-
Sabine	-	53,750	Colorado	45,328	35,000
Galveston	-	14,330	Chicago	812,260	35,000
Laredo	3,399,841	1,099,343	Duluth	-	7,000
			Grand Total	21,477,390	13,228,505

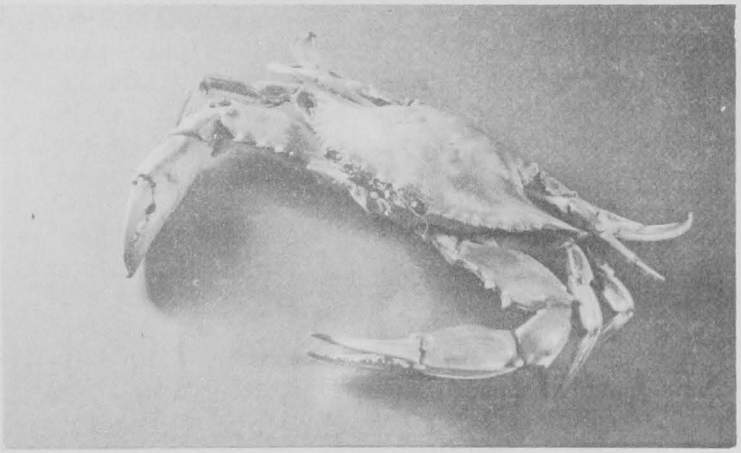
The imports from the shrimp fishery on the west coast of Mexico seemed to be around 2,000,000 pounds greater than for the previous year.

Notes on the Chesapeake Bay's Fisheries, 1948

Fisheries production during 1948 in the Chesapeake Bay (including the adjacent strip of seacoast from Virginia Beach to Ocean City) gave Maryland and Virginia fishermen record incomes, as has been the case for the preceding three or four years, according to a recent report from the Service's Fishery Marketing Specialist stationed at Weems, Va. The balance between supply and demand was, on the whole, maintained. There were no gluts to depress prices, and no scarcities except for croakers. In the summer of 1948, hook-and-line fishermen complained of the scarcity of croakers, and the fishermen are now seeking some protection for this species.

OYSTERS: There was a scarcity of oysters in certain sections of Maryland and Virginia, but the over-all production level was maintained in both States.

CRABS: There were enough crabs in the Bay in 1948 with crabbing activities about equal to preceding years. Winter crab-dredging catches were satisfactory in the Bay in the early months and unsatisfactory along the seacoast. However, in the closing months of the year, the seacoast had crabs while they were scarce in the Bay. Summer crabbing yielded a good crop. Crab-pot users increased, and Maryland decided to raise the limit of 35 pots per licensee to 50 to conform with Virginia's limit.



THE BLUE CRAB (CALLINECTES SAPIDUS) OF THE SOUTH ATLANTIC AND GULF COASTS, ALTHOUGH TAKEN ALL ALONG THE EASTERN SEABOARD FROM NEW YORK TO TEXAS, IS MOST PLENTIFUL IN THE CHESAPEAKE BAY AREA.

CANNING: During 1948, canneries partially made up for the slump in the previous year occasioned by the light runs of alewives, the principal species used for canning. Packs of menhaden and whiting, canned during the war because of food shortages and later for Government purchase for foreign relief, were discontinued.

SHAD: The shad runs of 1948 showed no sign of returning to their former abundance. Prices were maintained at a profitable level for both fishermen and dealers, but the fish were all comparatively small, probably because they were first spawners. The catch, however, was slightly higher than in previous years.

FROZEN AND PACKAGED FISH: The growth of freezing and packaging fish and shellfish was almost negligible. At present, there are few Chesapeake Bay fish that produce a fillet comparable in consumer appeal to the New England species. Therefore, most frozen packaged fish are pan-dressed only. Constant experimentation continues, and one Maryland firm produced a frozen pan-dressed shad, cellophane wrapped. Reports indicate that it sold well. A Virginia firm tried brined pan-dressed alewives in 3-pound jars.

OTHER DEVELOPMENTS: A number of small developments took place. A brisk demand for dressed snapper turtle meat was built up by one Virginia firm until the supply of snapper turtles dwindled.

The catfish industry, previously confined to a small area in the James River, branched out State-wide, wherever the laws permitted commercial fishing. Groups of men with catfish pots systematically visited and fished all the available waters.

Another firm in Maryland experimented with canned smoked herring; another with scrubbed, sterilized crab shells for deviled crabs; a third with diamond-back terrapin, cooked, removed from the shell, packaged and frozen; and a fourth with smoked jumbo shrimp.

MENHADEN: The menhaden industry in Virginia concluded a profitable season even though its fleet was slightly larger and its catch slightly smaller than during the previous season. However, the competition of imported fish meal and oil and increased production and imports of competing products began to drive menhaden products to a lower price level. (See Commercial Fisheries Review, January 1949, page 28.)

OTTER-TRAWL FISHERY: For the past 20 years, an increasingly important element of the Virginia fish catch has been the otter-trawl fishery. At first, it was prosecuted almost entirely by New England interests, which today still hold a prominent position. However, Virginia and Maryland vessels have been added to the expanded fleet, and last year, a record-breaking number landed fish at Virginia ports.

FISHERY BYPRODUCTS: One canner of alewives in Virginia installed a dryer to convert cuttings into dry scrap, and one menhaden operator moved to install equipment for processing the protein-rich stickwater.

A plant for the manufacture of fish scrap and oil from fish cuttings and trash fish began operations in Maryland, making a total of two for that State.

MACKEREL GILL-NETTING: Ocean gill-netting for Boston mackerel by local fishermen increased during the year. A few years ago, these fish were caught principally by northern vessels.

Notes on Delaware's Fisheries, 1948

Although Lewes, Delaware, is one of the principal fishing ports in the nation because of the large volume of menhaden delivered to its two fish meal and oil plants, few persons know that it often ranks among the first half dozen ports in the country. In addition to its importance as a menhaden port, Lewes is the most important food fish port in Delaware, according to the Service's Fishery Marketing Specialist conducting a survey of the fisheries of Delaware. It is the only landing place for otter-trawl vessels between Ocean City, Md., and Cape May, N. J.

During 1948, catches from the waters of Delaware Bay were poor. Croakers were scarce, the gray sea trout (weakfish) were of very small size, white perch were not as abundant as in the past few years, and shad production was lower than in previous years; however, the catch of striped bass was good.

Notes on New Jersey's Fisheries, 1948

Except for the migratory species which provide erratic catches throughout the years, the Delaware Bay area produces consistently smaller amounts of fish each year, according to the Service's Fishery Marketing Specialist conducting a survey of the fisheries of New Jersey. However, the oyster industry shows signs of prosperity in this area with little fluctuation in production, and the crab catch for 1948 was good, following several bad years. The lower production of crabs in previous years was attributed to several severe winters. Crabbers are not permitted to use dredges and the gear generally used is trot-lines.

BRAILING MENHADEN FROM NET INTO VESSEL OFF NEW JERSEY.

OTTER-TRAWL FISHERY: The New Jersey otter trawlers land at Cape May, Wildwood, Atlantic City, Beach Haven, Barnegat City, and Point Pleasant, with Cape May, Wildwood, and Point Pleasant receiving the great bulk of the dragger catch. It was a very poor year for the New Jersey otter-trawl fleet. Catches were light for many species and no one species increased in quantity or importance. The many additions to the otter-trawl fleet increased the fishing effort in the State's waters, but not the total production.

POUND-NET FISHERY: The pound-net fishery suffered from the effects of decrease in production and lower prices. Those in the southern part of the State felt the decline most, with the northern ocean and bay pound nets doing generally better. It is expected that there will be fewer nets set out during 1949.

POT FISHERY: Pot fishermen had an excellent season in 1948, taking large quantities of sea bass and lobsters. Some pot fishermen are concerned about the future catch of lobsters.

OTHER FISHERIES: Large schools of mackerel provided good catches for the jig fishermen. Prices were a little below those for 1947. The production of cod with baited trawl-lines during the winter season was fairly good, but prices were somewhat lower than the previous year. New Jersey took a large share of the good shad run in the Hudson River and adjacent areas. The menhaden catch was lower than in 1947.

Notes on New York's Fisheries, 1948

Financially, the year 1948 was a good one for the fisheries of New York State, according to the Service's Fishery Marketing Specialist conducting that State's survey. While the exact data on production are not available at this time, it is possible to state that the value of the 1948 catch will equal and may even surpass that for 1947. Prices paid to fishermen, in general, were somewhat higher in 1948, with the possible exception of a short period towards the end of the year. The total average price from available figures, at present, seems to have been slightly higher than in 1947.

Some Long Island fishing localities continued to show a decline in production, notably Great South Bay for shellfish and Freeport and Point Lookout areas for surf or skimmer clams. In the latter case, it was not so much the scarcity of surf clams that curtailed production, but rather the lack of demand for the canned product.

Long Island fishing vessels are having difficulties landing at certain ports because of the lack of water in the channels. This situation has been under investigation.

Landings at the New York City Fulton Fish Market in 1948 surpassed those for 1947 by over 2,500,000 pounds. Total landings in 1948 brought in by 767 trips totaled 13,727,426 pounds compared with 1947 when 11,059,453 pounds were brought in by 497 trips.

Pacific Oceanic Fishery Investigations Reports Progress

HONOLULU OFFICE: The Honolulu office of the Pacific Oceanic Fishery Investigations moved on January 17 from the Territorial Agriculture Building to the temporary quarters provided by the Navy in the Civilian Personnel Building on Kamehameha Highway. These quarters will be occupied until the proposed fishery laboratory has been completed, according to a January 1949 report from the Director of the Investigations.

RECONDITIONING AND CONVERSION OF YP-646: The reconditioning of the YP-646 has been completed and delivery of the vessel was made on January 26. At the sea trials, the main engine performed in a highly satisfactory manner and the vessel could be run at speeds approximating three knots at the extreme low setting of the controls which will permit trolling. It is now moored at a shipyard for conversion work. This vessel will be named Henry O'Malley.

RECONDITIONING OF RESEARCH VESSEL: The reconditioning and reconversion of the hull and machinery of the YP-635 as a research vessel has proceeded according to plans and trials were scheduled for about February 12. It will be named Hugh M. Smith for an early Commissioner of Fisheries.

HAWAIIAN-LINE ISLANDS RECONNAISSANCE: Although this project has been delayed, a 5-day survey trip was made aboard the Japanese sampan, Constance C, during the week of January 3-7. Data were collected relating to skipjack and "bait" fishes. In addition, statistical data obtained from the Territorial Division of Fish and Game Department are being compiled into usable charts, graphs, and tables.

STUDIES OF TUNA BIOLOGY: Some morphometric data on the yellowfin tuna have been obtained at Honolulu. Arrangements have been made for obtaining morphological measurements and weights on the tunas brought into the Otani market for auction.

TUNA LIVER MEAL PROJECT: Several lots of tuna liver meal were prepared. The tuna livers were converted to meal by three methods of processing:

(1) Lyophilization, or the removal of moisture through its sublimation from the frozen state.

(2) Dry-rendering, or the removal of moisture through evaporation by indirect application of heat to the material.

(3) Acetone extraction, or the removal of oil and moisture through the solvent action of acetone.

These lots will be evaluated through chemical analyses to determine the nutritive qualities of the several tuna liver meals, including content of protein, minerals, oil, and of the several B-complex vitamins.

Proposed Indo-Pacific Fisheries Council Accepted by China and Ceylon

The Government of China, under the date of January 28, 1949, and the Government of Ceylon, under the date of February 21, 1949, notified the Food and Agriculture Organization of their acceptance of the Agreement reached at Baguio, Republic of the Philippines, on February 28, 1948, for the formation of an Indo-Pacific Fisheries Council. France, the Philippines, the United States, Siam, India, Burma, and the Netherlands also have accepted the Agreement. (See Commercial Fisheries Review: August 1948, page 17; December 1948, page 27; January 1949, page 24.)

Delegates to Inaugural Meeting of Indo-Pacific Fisheries Council

The United States Delegation to the Indo-Pacific Fisheries Council which met at Singapore on March 24, 1949, according to the State Department, were:

DELEGATE: O. E. Sette, Director,
Pacific Oceanic Fishery Investigations,
Fish and Wildlife Service,
San Francisco, Calif.

ALTERNATE DELEGATE: William E. S. Flory,
Deputy to Special Asst. to Under Secretary of State
for Fisheries and Wildlife,
Department of State,
Washington, D. C.

ADVISORS: Charles Butler, Chief Technologist,
Pacific Oceanic Fishery Investigations,
Fish and Wildlife Service,
Honolulu, Hawaii.

Dr. H. J. Deason,
Office of Foreign Affairs,
Fish and Wildlife Service,
Washington, D. C.

Dr. H. E. Warfel, Chief Biologist,
Philippine Fishery Program,
Fish and Wildlife Service,
Manila, Philippines.

Review of the Fisheries of the United States and Alaska, 1948

INTRODUCTION: During 1948, United States and Alaskan fishermen captured about 4.5 billion pounds of fish and shellfish, estimated to have been valued at over $300,000,000 to the fishermen. The volume of the catch was almost identical with the production in the three previous years, and the average yield during the period from 1935 to 1939.

Outstanding developments during the year were the record catches of tuna and rosefish; the continued high production of menhaden; and the declines in the catches of salmon and Pacific and Atlantic mackerel. The catch of menhaden off the Atlantic Coast and Gulf States is estimated at about 950,000,000 pounds--more than twice the production of salmon, which held second place. The Pacific pilchard or sardine fishery yielded a catch of about 364,000,000 pounds, a recovery of over 100,000,000 pounds from the low level of the previous year. Pacific Coast fishermen landed about 325,000,000 pounds of tuna during the year, a new record, while the catch of sea herring on both coasts totaled about 350,000,000 pounds. Alaskan fishermen took about 166,000,000 pounds, and an additional 180,000,000 pounds were landed in Maine. The catch of rosefish totaled 241,000,000 pounds, also a new record and an increase of 95,000,000 pounds over the previous year.

PRINCIPAL PORTS: San Pedro, Calif., maintained its position as the leading United States fishing center, with total landings of about 460,000,000 pounds, valued at $30,000,000 to the fishermen. Gloucester, Mass., was in second place with landings of 250,000,000 pounds, valued at $11,000,000. San Diego, Calif., and Boston, Mass., shared third position, with landings of about 200,000,000 pounds each. Because of the large tuna landings at San Diego, the value of the catch at that port is estimated at $35,000,000, while the Boston deliveries yielded fishermen $16,000,000.

DISPOSITION OF THE CATCH: Sufficient data are not yet available to accurately determine the 1948 disposition of the domestic catch of fishery products. However, it is expected that it will be quite similar to that in the previous year,

when the catch of about 4.4 billion pounds was utilized as follows (round weight basis):

Fresh & frozen	1,695,000,000 lbs.	Cured	115,000,000 lbs.
Canned	1,275,000,000 "	Byproducts & Bait	1,315,000,000 "

CONSUMPTION: The consumption of fishery products in the United States is believed to have amounted to somewhat over 11 pounds, edible weight basis, per capita. This was above the wartime level of 9 pounds, which resulted from the allocation of a large portion of the canned pack to the armed services and to Lend-Lease distribution.

FISHING CRAFT: Nearly 1,200 vessels of 5 net tons and over were documented as fishing craft during 1948. This was about 9 percent less than the number entering the fleet the previous year, but between three and four times the number documented annually prior to 1940. In the four years ending with 1948, a total of 4,300 vessels have been documented as fishing craft. In 1940, the entire fleet in the United States and Alaska totaled only 5,562 vessels. Despite the large increase in the size of the fleet, the annual catch has remained almost identical with the prewar production. This has been due largely to the low yields of salmon in Alaska and pilchards in California.

CANNED FISH AND SHELLFISH: The 1948 pack of canned fishery products is estimated to have totaled about 750,000,000 pounds--approximately the same as in 1947, when the production totaled 754,000,000 pounds, valued at $311,000,000. The production of canned salmon amounted to only 4,750,000 cases--nearly 1,000,000 cases less than in 1947. The packs of Maine sardines (over 3,000,000 cases) and tuna (over 7,000,000 cases) were the largest in history. The California pack of mackerel was about 550,000 cases less than the record 1947 production of 1,477,000 cases.

U. S. & Alaska Pack of Canned Fish & Shellfish - 1948 & 1947

Item	1948 1/	1947	
	Standard Cases	Standard Cases	Value
Salmon	4,750,000	5,642,436	$120,659,840
Sardines, Maine	3,200,000	2,834,690	27,677,704
Sardines, California	2,700,000	1,652,592	16,538,375
Tuna	7,150,000	5,894,495	90,609,175
Mackerel, California	925,000	1,477,198	12,571,059
Mackerel, East Coast	(2)	277,752	2,447,574
Alewives	(2)	139,816	779,150
Anchovies	(2)	130,119	1,377,275
Whiting	(2)	221,157	1,422,520
Clam Products	(2)	1,258,322	8,650,255
Oysters	(2)	255,414	4,259,485
Shrimp	380,000	337,381	8,192,004
Squid	375,000	221,056	898,210
Other	(2)	1,526,078	14,597,794
Total	(2)	21,868,506	310,680,420

1/Data for 1948 partly estimated. 2/Not available.

FROZEN FISH: Preliminary data indicate that in excess of 290,000,000 pounds of fishery products were frozen in the United States and Alaska during 1948 by firms reporting their activities to the Fish and Wildlife Service. This was an increase of about 45,000,000 pounds over the previous year and several million pounds greater than the former record of 286,000,000 pounds established in 1945. The major portion of the increase was due to heavy freezings of rosefish fillets, which were about 25,000,000 pounds greater than in the previous year. During the early months

of 1948, stocks of frozen fish remained below those for the same period in 1947. From July on, they averaged above the holdings for the latter part of 1947. However, they were still considerably below the 1946 average for this period.

FISH MEAL AND OIL: The production of fish meal in 1948 is estimated at about 188,000 tons, the same as in the previous year, while the yield of oil is believed to have totaled about 15,000,000 gallons. This is somewhat less than the 15,900,000 gallons produced in 1947.

FOREIGN TRADE: During 1948, imports of edible fishery products amounted to 472,318,000 pounds, compared with 406,962,000 pounds in the previous year. Exports of edible fishery products amounted to only 99,765,000 pounds, less than half the 208,880,000 pounds exported during 1947. There was a large increase in the imports of groundfish, including rosefish, fillets. Total imports of these fillets in 1948 amounted to nearly 54,000,000 pounds, compared with 35,000,000 pounds in 1947, and the former record imports of 49,000,000 pounds in 1946.

PROSPECTS FOR 1949: Consumption of fishery products by United States civilians in 1949 is expected to be maintained at a high rate; however, retail prices are likely to average somewhat lower than the level prevailing in the latter part of 1948. Cold storage stocks on January 1 appear to be sufficient to meet the domestic needs until commercial fishing operations pick up seasonally in the spring. Year-end stocks of canned fish at the packer level were low; however, holdings at the wholesale and retail distribution levels are believed to be sufficient for consumer needs until the marketing of the 1949 pack begins.

The international trade of the United States in fishery products is expected to be a repetition of 1948. The relative shortage of dollar exchange and the strong desire of foreign countries for capital goods are expected to be major obstacles to any expansion of exports of fishery products. At the same time, if large amounts of fish are caught by surplus producing countries, the quantity of fish--especially fresh and frozen groundfish and rosefish fillets--shipped to the United States may be larger than in 1948.

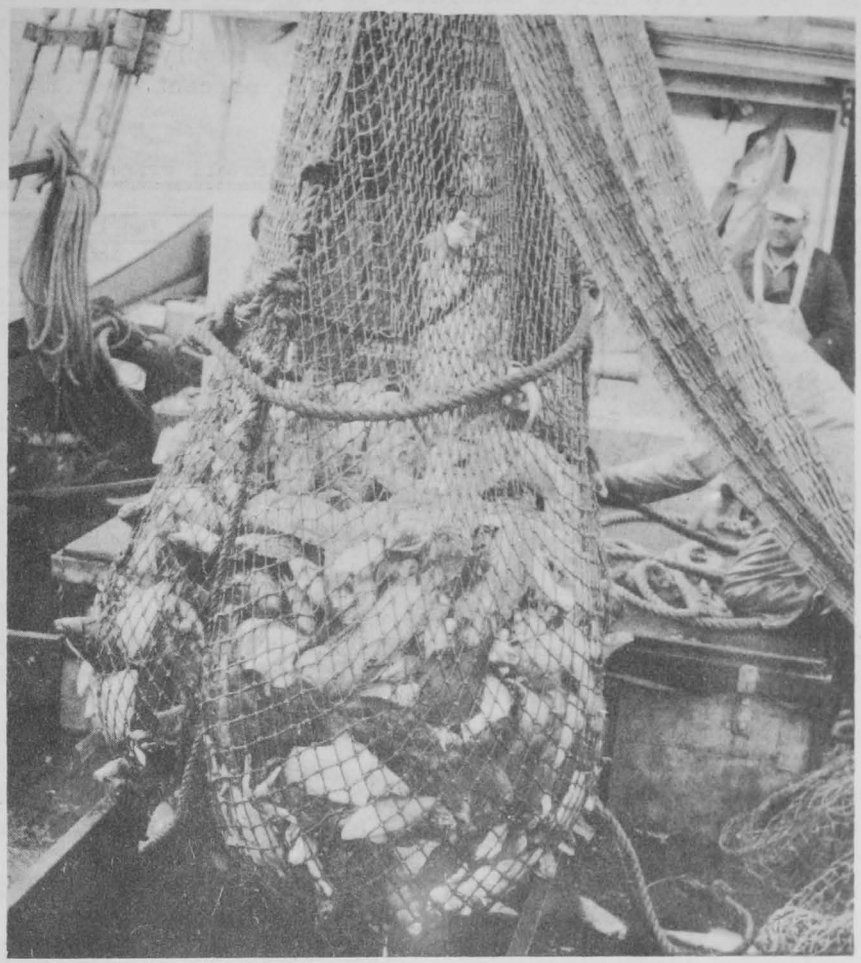
Service Representative to Attend Conferences and Study Asian Fisheries

Continued American participation in international efforts to increase the world's food supply was demonstrated February 25 when the Director of the Service announced the departure of Dr. Hilary J. Deason, Chief of the Service's Office of Foreign Activities, on a trip that will take him to one international fishery conference and to inspections of three Asian fishing industries.

Dr. Deason arrived in Manila on March 1 for a three-week stay in the Philippines. He inspected the progress of the Fish and Wildlife Service's Philippine Fishery Program, and met with officials of the Philippine Government to discuss future program activities. He attended the inaugural meeting of the Indo-Pacific Fisheries Council in Singapore March 24-April 1 as an adviser to the U. S. delegate, and will stop in Siam, India, and Pakistan to obtain information and discuss with local officials the fisheries of those countries.

Washington and Oregon Bottom-fish Industry Production Declines

BOTTOM-FISH INDUSTRY: This industry has suffered sharply from a depressed market this winter, and local processors who fillet claim the major factors responsible are falling meat prices and imports of foreign frozen fish fillets, according to a recent report from the Service's Fishery Marketing Specialist at Seattle. The bottom-fish industry, which was given a tremendous impetus by the Government's wartime purchases of frozen fish fillets, is slowly being forced into inactivity, with several local processors withdrawing completely from handling and processing of bottom fish, and with others curtailing production awaiting further developments and future market trends.



EMPTYING A CATCH OF MIXED BOTTOM FISH FROM COD END OF TRAWL ON BOARD A VESSEL FISHING OFF THE OREGON COAST.

Wholesale and Retail Prices

The wholesale commodity index as of January 11, 1949, was 0.7 percent lower than December 14, 1948, and 3.8 percent lower than January 13, 1948, according to the Bureau of Labor Statistics of the Department of Labor. The rate of decline in foods, although not as great as the previous month, still was substantial. The wholesale food index was 2.5 percent below the previous month and 9.7 percent lower than on January 13, 1948.

Canned salmon did not follow the general trend of all foods and, during January 1949, the average wholesale price of canned pink salmon was 4.3 percent higher than December 1948 and 10.2 percent higher than January 1948. There was no change in the average price of canned red salmon compared with the previous month.

The average decline of 0.1 percent in retail food prices in mid-January 1949--the sixth in succession--brought the retail food index 5.5 percent below the July

peak and 2.3 percent below January 1948. In contrast to all foods, the fresh and frozen fish prices continued to increase to 1.5 percent over mid-December 1948 and 0.7 percent over mid-January 1948. This increase is not unusual at this time of the year due to a seasonal decline in supply during the winter months. Canned pink salmon retail prices increased 0.5 percent over the previous month and 18.5 percent over a year ago.

Wholesale and Retail Prices

Item	Unit		Percentage change from--	
Wholesale: (1926 = 100)		Jan.11,1949	Dec.14,1948	Jan.13,1948
All commodities	Index No.	160.5	-0.7	-3.8
Foods	do	164.4	-2.5	-9.7
Fish:		Jan.1949	Dec.1948	Jan.1948
Canned salmon, Seattle:				
Pink, No. 1, Tall	$ per doz. cans	5.910	+4.3	+10.2
Red, No. 1, Tall	do	6.649	0	+ 4.3
Cod, cured, large shore, Gloucester, Mass.	$ per 100 lbs.	15.375	+2.5	+ 6.0
Retail: (1935-39 = 100)		Jan.15,1949	Dec.15,1948	Jan.15,1948
All foods	Index No.	204.8	-0.1	-2.3
Fish:				
Fresh, frozen and canned	do	331.7	+1.1	+6.7
Fresh and frozen	do	272.4	+1.5	+0.7
Canned pink salmon	¢ per lb. can	61.4	+0.5	+18.5

A METHOD FOR EVALUATION OF THE NUTRITIVE VALUE OF A PROTEIN

Dietitians and nutritionists have more recently shown considerable interest in the effect of cooking on the nutritive value of various foods. Almost all of the early assays of nutrient elements in foods was limited to raw foods. This work is valuable in order to determine the expected variability in the amounts of nutrient elements in the raw product, but does not permit the evaluation of a serving portion in terms of the recommended daily allowances of the various nutrient elements. More emphasis should now be placed on determinations of the nutritive values of the foods as served.

Marks and Nilson (1946) reported that baking, broiling, boiling, or simmering had no adverse effect on the nutritive value of the protein of cod. Martinek and Goldbeck (1947) reported that baking at 375° and 500° F. had no differential effect on the nutritive value of the protein of croaker fillets. The methods of cooking which were chosen for these studies did not require the addition of any other products, except a light brushing of oil on the baked or broiled fish.

--Fishery Leaflet 296