

TRENDS AND DEVELOPMENTS

Additions to U. S. Fleet of Fishing Vessels

A total of 17 vessels of 5 net tons and over were issued first documents as fishing craft during January 1956, according to the U. S. Bureau of Customs. This was 1 vessel less than the number reported for January of last year.

The Chesapeake area led all others during January 1956 with 5 newly-documented craft, followed by the South Atlantic area with 4, the Gulf area with 3, the Middle Atlantic area with 2, and the New England, Pacific, and Alaska areas with 1 each.

U. S. Vessels Issued First Documents as Fishing Craft, January 1956 and Comparisons

Area	January		Total 1955
	1956	1955	
	. . . (Number) . . .		
New England	1	-	18
Middle Atlantic	2	1	13
Chesapeake	5	4	54
South Atlantic	4	4	65
Gulf	3	3	103
Pacific	1	2	117
Great Lakes	-	-	9
Alaska	1	4	35
Hawaii	-	-	3
Virgin Islands	-	-	1
Total	17	18	418

Note: Vessels have been assigned to the various areas on the basis of registered home ports.



American Samoa

TUNA VESSELS REPORTED LANDING BIG CATCHES: The 1955 winter fishing season by the American Samoan tuna fleet, based at Pago Pago, appears to be very successful, according to the Pacific Islands Monthly, an Australian monthly magazine. The tuna vessels have brought in large catches from the water east of Fiji, and also from areas around the Cook Islands. Some record catches were reported which may be due to the long periods of dry clear weather.



California

SARDINE CATCH INCREASED IN 1955/56 SEASON: Landings by California's fishing fleet totaled about 75,000 short tons during the season which closed February 1, 1956, according to preliminary reports received by the California Department of Fish and Game. The 1955/56 catch increased about 12 percent over the 67,000 tons landed in the 1954/55 season.

Both the 1955/56 and the 1954/55 catch totals could have been exceeded considerably had there not been wage and price disputes and some adverse market conditions.

In both fishing seasons the catch represented sardines migrating north from Mexican waters, with practically none caught north of Morro Bay. Virtually none were landed at Monterey, and the fish processed there were trucked north from southern California. The catch was good in the Santa Barbara and Port Hueneme areas early in the season and later spread south as far as Oceanside.



Cans--Shipments for Fishery Products, 1955



Total shipments of metal cans for fish and sea food during 1955 amounted to 110,191 short tons of steel (based on the amount of steel consumed in the manufacture of cans), compared to 109,202 short tons for 1954.

Since the packs of canned tuna, Maine sardines, and salmon in 1955 were lower than in 1954, the greater shipments of cans in 1955 were for stock purposes rather than meeting current packing needs.

Note: Statistics cover all commercial and captive plants known to be producing metal cans. Reported in base boxes of steel consumed in the manufacture of cans, the data for fishery products are converted to tons of steel by using the factor: 23.0 base boxes of steel equal one short ton of steel.



Federal Purchases of Fishery Products

FRESH AND FROZEN FISHERY PRODUCTS PURCHASED BY THE DEPARTMENT OF DEFENSE, JANUARY 1956: The Army Quartermaster Corps during January 1956 purchased for the use of the U. S. Army, Navy, Marine Corps, and Air Force a total of 1.1 million pounds (valued at \$0.7 million) of fresh and frozen fishery products. This was a decline of 39.2 percent in quantity and 16.9 percent in value as compared to December 1955 purchases. Compared with January 1955, the drop was 47.8 percent in quantity and 13.3 percent in value.

QUANTITY		VALUE	
January		January	
1956	1955	1956	1955
(Millions of Lbs.)		(Millions of \$)	
1.1	2.1	0.7	0.9

Prices paid for these fishery products by the Department of Defense in January 1956 averaged 68.7 cents a pound as compared with 43.7 cents in December 1955 and 41.4 cents a pound in January 1955. This would indicate that

that January 1956 purchases consisted of higher-priced fishery products.

In addition to the purchases of fresh and frozen fishery products indicated above, the Armed Forces generally make some local purchases which are not included in the above figures.

VETERANS ADMINISTRATION 1956 REQUIREMENTS FOR CANNED FISH: Among the estimated requirements of the Veterans Administration for canned fruits, vegetables, and fish to be procured for 1956 are the following canned fish items:

Descriptions	Can Size	Dozen Cans
Salmon, red or sockeye	No. 1	30,000
Salmon, red or sockeye with sodium content restricted to not more than 60 mg. per 100 grams.	No. 1/2	7,000
Tuna, chunk	No. 1	18,000
Tuna, chunk, with sodium content restricted to not more than 50 mg. per 100 grams	No. 1/2	8,000

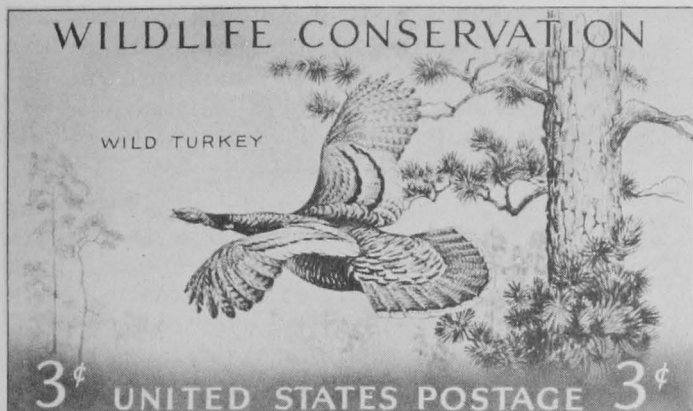
Invitations for bids will be issued by the General Supplies Section, Procurement Division, Supply Service, Veterans Administration, Washington 25, D. C., at a later date.



Fish and Wildlife Motif on United States Postage Stamps

For the first time, United States postage stamps this year will be used to call attention to the country's important fish and wildlife resources, Secretary of the Interior Douglas McKay said February 29.

The United States is one of the few major countries in the world that has not given recognition to fish and wildlife as a motif of postage-stamp design, according to the Secretary. Although conservationists and interested stamp collectors started a movement in 1949 for a "wildlife on stamps" series, they met with no success. However, when the matter was brought directly to the attention of President Eisenhower last September he immediately recommended that such stamps be issued to create and maintain greater public interest in the country's natural resources.



The stamp is 0.84 by 1.44 inches in dimension, arranged horizontally with a single outline frame. The color of the stamp has not been determined as yet.

will be the pronghorn antelope, king salmon, and wild turkey.

Selection of the designs and responsibility for their authenticity was delegated to the Fish and Wildlife Service by the Post Office Department. Robert W. Hines, chief illustrator of the Service and noted wildlife artist, made the drawings for the stamps.

The designs selected by the Service--representing a mammal, a bird, and a fish--have been chosen because they are three different species of typical American wildlife and because they offer outstanding examples of conservation work carried on by the Federal and State Governments.

All three of the stamps will be in the 3-cent denomination. Places and dates of first-day sale will be announced later by the Post Office Department.

The new stamps are expected to be tremendously popular not only with conservationists but with topical stamp collectors, Secretary McKay said.

The Postmaster General announced March 7 that the first of the three stamps being issued to emphasize the importance of Wildlife Conservation in America will be released at Fond du Lac, Wis., on May 5, 1956. This special 3-cent stamp will be first placed on sale on the occasion of the convention of the Wisconsin Federation of Stamp Clubs.



Groundfish Fillets--United States Production and Imports

United States Production and Imports of Groundfish Fillets, 1940-55		
Year	Production	Imports
	. . . (Million Pounds) . . .	
1955	<u>1</u> /110.0	129.0
1954	122.4	137.5
1953	112.3	89.7
1952	132.6	107.4
1951	148.8	87.6
1950	136.6	64.8
1949	140.1	47.3
1948	137.8	54.0
1947	115.5	35.1
1946	126.7	49.3
1945	126.4	43.2
1944	108.8	24.5
1943	87.3	16.3
1942	105.4	16.7
1941	122.8	9.9
1940	91.4	9.7

1/ Estimated.

The United States production of fresh and frozen groundfish (including ocean perch) fillets in 1955 was estimated at 110.0 million-pounds--10.1 percent less than in 1954 and 26.1 percent less than the record production of 148.8 million pounds in 1951. Included in the production data for 1954 and 1955 is the production of fillet blocks and slabs, the raw material used to manufacture fish sticks.

United States imports of fresh and frozen groundfish (including ocean perch) fillets and steaks has risen steadily from 9.7 million pounds in 1940 to a record peak of 137.5 million pounds in 1954, and a slight drop to 129.0 million pounds in 1955. Also included in the data for 1954 and 1955 are the imports of fillet blocks and slabs used by United States producers to manufacture fish sticks.



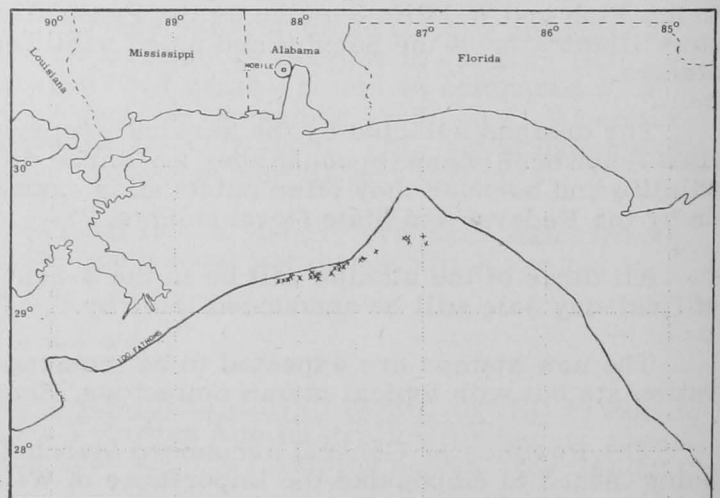
Gulf Exploratory Fishery Program

DEEP-WATER TRAWLING FOR RED SHRIMP BY "OREGON" (Cruise 36): A two-week red shrimp trawling trip (Cruise 36) off the coasts of Mississippi, Alabama, and western Florida was completed by the Service's exploratory fishing vessel Oregon on February 28.

In general, shrimp catches were considerably smaller than those made in this same area last fall. A total of 26 three- to five-hour drags caught 1,993 pounds of heads-on red shrimp (Hymenopenaeus robustus). In 17 of these drags, 1,800 pounds were caught. Nine of the drags resulted in bogging of the trawls or ripped netting. The 1,993 pounds of heads-on shrimp yielded 1,100 pounds of heads-off shrimp which ran 25-30 count.

Fishing operations were conducted in depths of 200-275 fathoms with the most productive drags made in 215 fathoms adjacent to 88° west longitude. Three consecutive drags in this area caught 575 pounds of red shrimp. Weather conditions at this point forced discontinuance of fishing operations for the balance of the cruise.

A total of seven days of fishing time were lost due to adverse weather.



M/V Oregon trawling stations (x), Cruise 36.

Whiting and hake were the predominant incidental noncommercial species in all of the catches. From 100 to 800 pounds of these two species were taken in each tow. The individual fish varied in weight from $\frac{1}{2}$ pound to 2 pounds.

The Oregon was scheduled to leave Pascagoula March 20 on a 4-week tuna long-lining trip (Cruise 37) in the north-central and southwestern Gulf of Mexico. In March and April 1955, while the Oregon was engaged in deep-water shrimp exploratory work, a marked decline in the catch rate of yellowfin tuna was noted by the commercial vessels that were experimenting with long lines in the northeastern Gulf. The primary objective of this cruise will be to obtain comparative catch information for the early spring season between these two areas.



Maine

SARDINE TECHNOLOGICAL RESEARCH PUSHED AT UNIVERSITY OF MAINE:

The work on several projects of technological research on Maine sardines at the University of Maine (Orono, Me.) is progressing at a good pace, reports the Maine Sardine Industry in a February 10 news release. The purpose of the research is to help Maine sardine canners improve their products and processes.

The researchers are well along on at least a dozen projects covering such matters as salt and moisture determination, best methods of preparing mustard and tomato sauces, efficient cooking times and temperatures, vacuum-packing, types of pack, temperatures in connection with cans of different sizes and thicknesses, flavor and texture, advantages of various types of oil and sauce, as well as other factors involved in the production of sardines.

Most of the work is being done in a recent addition to Holmes Hall, headquarters of the Experiment Station, and it is being financed by the Maine Sardine Council with funds derived from a 25-cents-a-case Maine State tax paid by all packers.

While visiting the laboratories, Council Chairman Ralph Stevens of Yarmouth stated that the research was needed by the industry to help it to compete with the thousands of other items being made available to the consumer in the nation's retail food stores. He predicted that the program would provide canners with information and improved techniques "that will be extremely valuable to all of us in the long run."

A staff, headed by the industry's Assistant Research Director Ralph Berglund, is utilizing standard factory equipment, such as retorts and sealing machines, with frozen fish, taken from Casco Bay last summer, as they attempt to unravel a variety of problems assigned to them. The packing operation is only one phase of the over-all program which has been functioning since last spring on a cooperative basis with Dr. Matthew Highland's Department of Food Processing of the Agriculture Experiment Station.



Marketing Prospects for Edible Fishery

Products, January-June 1956

United States civilian per capita consumption of fishery products during the next 3 to 4 months is expected to be a little below that of a year earlier. January 1 stocks, which are the principal source of supplies until commercial landings start increasing seasonally, were much smaller than on the same date in 1955.

Imports in the next several months probably will be substantially the same as during the comparable period of 1955. Retail prices of fishery products until mid-spring are expected to average about the same or a little higher than a year earlier, reflecting in part the smaller supplies.

During 1955 civilians consumed a little less fish and shellfish per person than in 1954. The consumption rate for the fresh and frozen products were up a little, but this increase was more than offset by the decline for the canned commodities. Retail prices of fishery products in 1955 averaged slightly lower than in the preceding year, judging from the Bureau of Labor Statistics wholesale price index.

The United States and Alaska commercial catch of edible fish and shellfish in 1955 was about 2 percent smaller than in 1954. The sharp decline in the catch of fish used for canning much more than offset the small increase in the total quantity marketed fresh or frozen. Because of reduced catch, the packs of canned salmon, Maine sardines, and tuna were each smaller than in 1954. The 1955 pack of canned salmon was the smallest since before World War I.

Commercial freezings of fish and shellfish in the United States and Alaska during 1955 totaled 315 million pounds, 4 percent more than a year earlier. Domestic cold-storage holdings of the frozen products at the end of 1955 amounted to 175 million pounds, 10 percent smaller than at the close of the previous year. The reduction in stocks reflects both heavier marketings and a lower level of imports of frozen groundfish blocks and fillets than in 1954.

United States imports of fresh and frozen fishery products--excluding frozen tuna, which for the most part are subsequently canned--were more than in 1954. The moderate reduction in receipts of frozen groundfish fillets and blocks was more than offset by increases for fresh and other frozen fish. Our exports of fishery products were much larger in 1955 than a year earlier. Most of the increase occurred because of heavy shipments of canned California sardines abroad, particularly to the Philippine Republic.

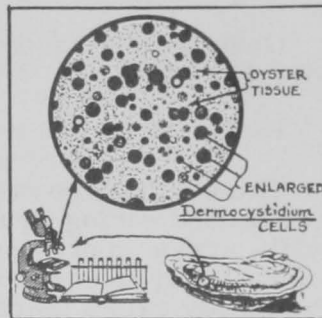
This analysis appeared in a report prepared by the Agricultural Marketing Service, U. S. Department of Agriculture, in cooperation with the U. S. Fish and Wildlife Service, and published in the former agency's February 21, 1956, release of The National Food Situation (NFS-75).



Maryland

OYSTER PARASITE DISTRIBUTION STUDIED: The fungus parasite Dermocystidium marinum, which often invades oysters, is believed responsible for the oyster losses in certain areas of Maryland. It was discovered about six years ago by biologists studying the causes of oyster deaths in the Gulf of Mexico, the February 1956 Maryland Tidewater News of the Maryland Department of Research and Education reports. During the past several years its presence and association with the loss of oysters in the lower Chesapeake Bay has been established by the Virginia Fisheries Laboratory. The parasites are very tiny single cells about two-tenths of an inch in diameter. As spores they are taken in by the oyster with its food and penetrate the walls of the digestive tract. They then multiply rapidly and are carried by the circulatory system to all parts of the oyster. Once within the oyster the parasite absorbs nourishment from the body fluids of the oyster and gradually dissolves the oyster tissues. In heavy infections they may cause large abscesses and ultimately the death of the oyster. Young oysters are resistant to the fungus and old oysters are most susceptible. Light infections may cause slow

growth and poor condition but do not kill oysters. However, as infection progresses to moderate and heavy, damage to the host becomes so great that it "gapes" and dies. Recent discovery of the parasite does not, of course, mean that it is new to the area in which it has been found. It is probable, in fact, that it has been present in oysters for many years.



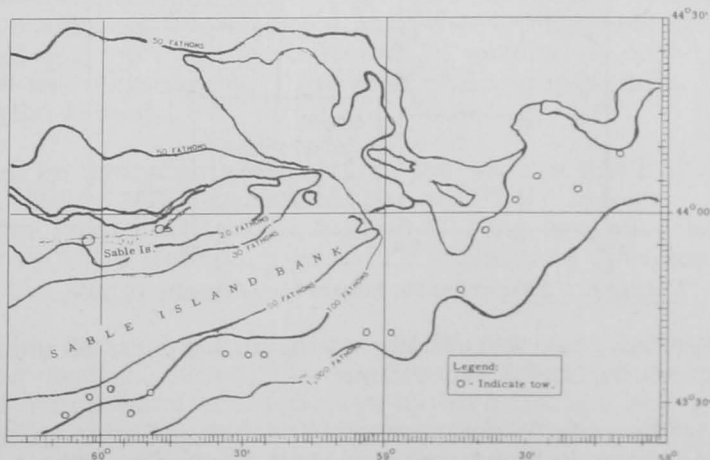
Although damaging to oysters, the yeastlike fungus is harmless to man and does not affect the flavor or nutritional value of oysters. The development in Texas during 1952 of a simple culture technique for the diagnosis of Dermocystidium infections has made possible large-scale surveys of its incidence in oysters. Small pieces of tissue are snipped from oysters and placed in tubes containing a nutrient medium. After several days of incubation at room temperature the tissue is removed from the tube and placed on a glass slide for microscopic examination. If fungus cells are present they will have enlarged to ten or more times their original size and can be stained blue with iodine which makes them easy to recognize. Since the parasites do not reproduce in culture, it is also possible to estimate the intensity of the infection by the number of stained cells present.

A survey is being made by the Chesapeake Biological Laboratory of the distribution of the fungus parasite among oysters in Maryland. Sample oysters have been collected from representative bars throughout the State and tested to determine whether, and to what degree they are infected with this fungus. High temperature and high salinity favor the development of the organism. Thus Dermocystidium infections typically show up in late summer in areas where the salinity is more than half that of sea water. Since a good portion of Maryland's oyster bars are in water less salty than this, they are relatively free from this disease. The pest has been found to be present in varying degrees of intensity on both sides of the Bay, roughly from the mouth of the Patuxent River southward. The study conducted in the fall of 1955 will be continued in order to evaluate the degree of infection where found, to determine the extent of infected areas in Maryland, and to establish the relationship of Dermocystidium infections to oyster mortalities and other factors influencing oyster populations.



North Atlantic Fisheries Exploration and Gear Research

OCEAN PERCH EXPLORATORY FISHING OFF SABLE ISLAND BY "DELAWARE" (Cruise 15): A "closer look" at the area east of Sable Island, Nova Scotia, where excellent catches of ocean perch (Sebastes marinus) were made on a previous trip (Cruise 9) was the primary purpose of Cruise 15 of the Service's exploratory fishing vessel Delaware. A combination of bad weather and uneven bottom resulted in only 16 drags being completed during this cruise, which was completed on February 17.



M/V Delaware's Cruise No. 15 (Feb. 6-18, 1956).

The best single catch was on February 10, at latitude 43° 39' N.

longitude $59^{\circ}16'$ W., when 7,000 pounds of ocean perch were taken in a 1-hour drag at an average depth of 200 fathoms. Average weight of the fish was 1.2 pounds.

Gear damage, from small tears to the loss of all four wings, occurred on 10 of the 16 drags.

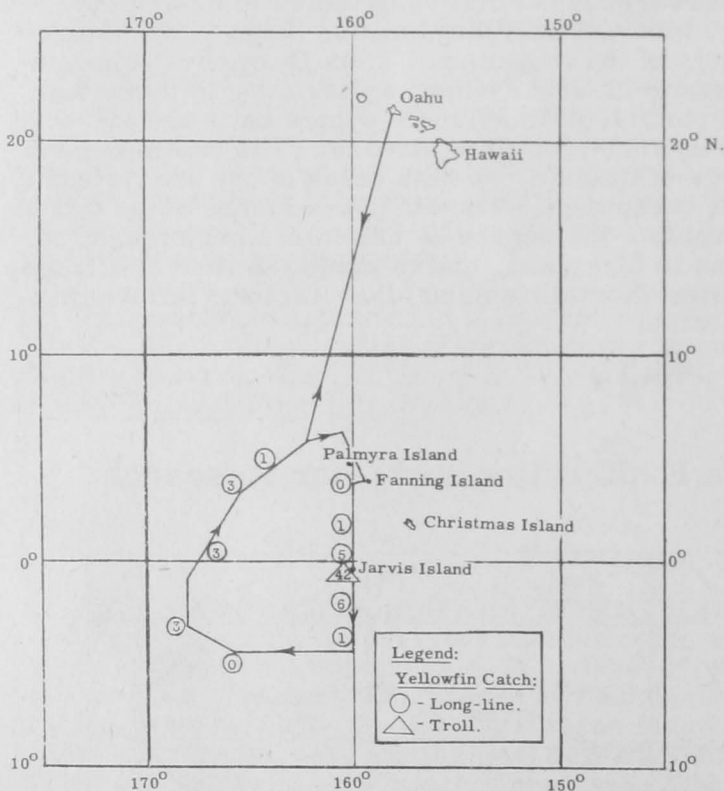
Part of the catch was iced in antibiotic ice for examination ashore.

The study of the seasonal availability of deep-water lobsters was scheduled to be continued during Cruise 16, with a repetition of exploratory tows made in productive areas on previous cruises. In addition, it was planned to expand the scope of deep-water lobster exploration to as far west as Hudson Canyon. A lobster fishery already exists there, but in relatively shallow water.



Pacific Oceanic Fishery Investigations

SONIC FISH FINDER USED BY "CHARLES H. GILBERT" TO LOCATE TUNA:
Cruise 25: Search for tuna schools with a recently-installed radarlike long-range sonic fish finder was the primary objective of Cruise 25 of the Charles H. Gilbert, a research vessel of the Service's Pacific Oceanic Fishery Investigations. The vessel left Pearl Harbor on January 16 and returned to that port on February 13, 1956.



Charles H. Gilbert cruise 25, January 16 to February 13, 1956.

long-line gear were 1 big-eyed, 5 skipjack, 38 sharks, 3 black marlin, 3 wahoo, 1 barracuda, and 3 lancetfish.

The only intensive trolling was conducted in the vicinity of Jarvis Island. Six lines were fished for a period of $5\frac{1}{2}$ hours. The catch consisted of 42 yellowfin, 6 wahoo, 34 jacks, 2 rainbow runners, 1 snapper, and 2 sharks. Almost all the fish were caught alongside the reef which extends only a short distance from shore.

A complete sea test of the "Sea Scanar" was curtailed by a mechanical breakdown in the instrument on January 21. Prior to the breakdown, a number of small skipjack tuna schools were recorded on the instrument just north of Palmyra Island. These fish schools were all observed within 1,200 feet of the vessel (range of instrument 2,400 feet) and were accompanied by bird flocks.

A total of 10 long-line stations was occupied in the equatorial zone. At each station 40 baskets of 13-hook cotton gear was fished. Only 23 yellowfin tuna were caught on the long-line gear with the highest catch of 6 yellowfin made just south of Jarvis Island. As evidenced by the catches, there was a conspicuous lack of yellowfin in the area covered. Other fish taken on the

The recording thermograph was on continuously throughout the cruise. Two small temperature "fronts" (changes of 1 to 1½ degrees) were crossed at 1° 02' N., 160° 10' W. and 3° 08' N., 165° 21' W.

The vertical temperature distribution (from bathythermograph) showed a deep thermocline at about 600 feet in the equatorial belt. The isothermal and near isothermal water which extended often to this thermocline depth gave evidence of considerable mixing of the surface waters. It should be mentioned that strong easterly winds (exceeding 15 knots) were encountered through the two weeks spent south of 5° N. latitude.

Eight of the long line-caught and 25 of the troll-caught yellowfin were tagged with the California-type plastic tags.

Cruise 26: The vessel left Pearl Harbor February 23 for Cruise 26 and returned February 27. The stabilization tests showed that the starboard head was defective. Thus, only the port transducer was used during the remainder of cruise 26.

The "Sea Scanar" was tested on a school of skipjack tuna (average size 20 pounds) located 14 miles off Maile, Oahu. Fish traces were obtained only on the 600-foot scale with negative results on the 2,400-foot scale. Several strong unidentified echoes were obtained while running along the gear of a local long-line vessel.

Triplane tests showed that the tilt angle of the transducer did not coincide with that shown on the indicator panel.

A total of 95 skipjack were tagged with the California-type plastic tags and released on cruise 26.

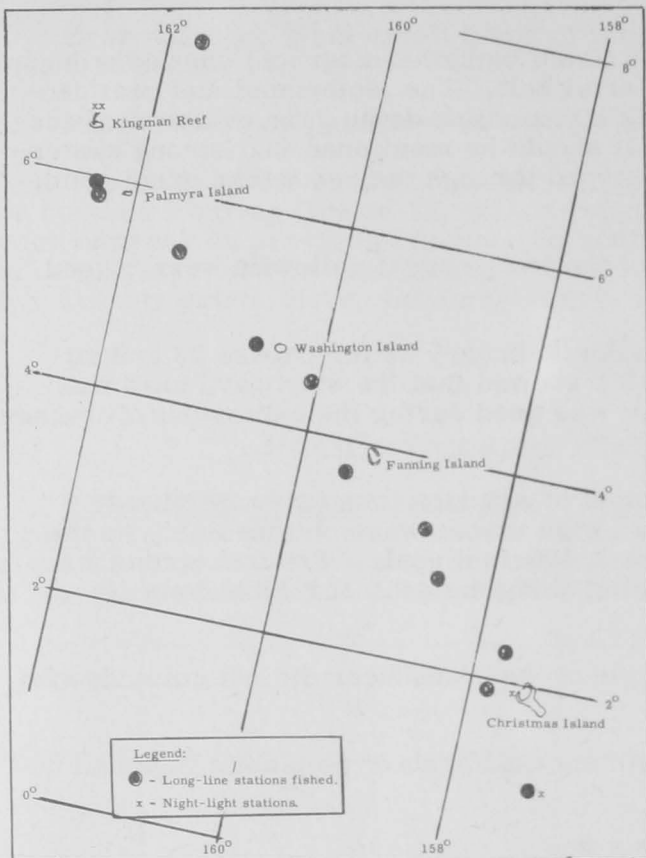
YELLOWFIN TUNA ABUNDANCE STUDIES IN LINE ISLANDS CONTINUED BY "JOHN R. MANNING" (Cruise 29): In order to obtain information on the abundance of yellowfin tuna in the Line Islands area, the Service's Pacific Oceanic Fishery Investigations vessel John R. Manning completed an experimental fishing trip on February 15. The vessel, which started the trip from Pearl Harbor on January 5, 1956, fished with conventional troll and long-line gear.

In general tuna appeared to be scarce around Christmas Island and in the southern part of the area, but some excellent catches were made with long lines at Palmyra Islands, where the best day's catch of 83 yellowfin gave a catch rate of nearly 14 fish per 100 hooks--about 5 times the average in Hawaiian waters. Long-lining results at Washington Island were also good. The best trolling was found around Kingman Reef and Washington Island.

The John R. Manning collected environmental data from the waters north and west of Oahu from January 5 to 7. Made BT observations from 10° N. to the equator along 157° 30' W. longitude from January 7 to 14. Fished 12 long-line stations and trolled for 12 days from January 15 to February 10 in the vicinity of the Line Islands.

A total of 23 days of scouting for fish schools and bird flocks, done concurrently with fishing operations or during daylight runs between stations, resulted in sightings of 52 tuna schools, 44 of which were accompanied by bird flocks, and 45 additional bird flocks. The area of greatest abundance was around Kingman Reef where 21 tuna schools and 10 bird flocks not associated with fish were sighted. At

all the other islands tuna schools and bird flocks were rather few in number. While a few large schools were sighted, most of them were in the small to medium categories, and the sizes of the fish were estimated as being between 5 to 30 pounds each.



John R. Manning, Cruise 29, January 5- February 15, 1956.

Trolling for 12 days from sunrise to sunset produced 108 yellowfin tuna, 6 skipjack, 260 wahoo, 13 rainbow runner, and 1 barracuda. The yellowfin catch totaled slightly over 1 ton. The best day's catch (30 yellowfin) was made at Washington Island and the next best catch (20 yellowfin) was made at Kingman Reef on two consecutive days.

Fishing for 12 days with 60 baskets of long-line gear set each day except the first, when only 56 were set, produced 169 yellowfin, 9 big-eyed, 7 skipjack, 9 marlin, 9 other fish, and 221 sharks. The yellowfin catch totaled about $9\frac{3}{4}$ tons. The best day's catch (83 yellowfin or 13.6 yellowfin per 100 hooks) was made off Palmyra Island. Another station in the same locality 9 days later yielded 37 yellowfin. The next best catch (23 yellowfin) was made off Washington Island. The rest of the stations averaged 3 yellowfin each.

A total of 105 live yellowfin (46 from long-lining and 59 from trolling) was tagged and released in good condition. In addition, 4 skipjack and 1 big-eyed were tagged and released.

Bathythermograms were taken at 30-mile intervals along $156^{\circ}30'$ W. longitude between 10° N. latitude and the equator. In addition, 4 bathythermograms were taken on the runs between the Line Islands and Honolulu and between Honolulu and the first BT position along $156^{\circ}30'$ W. longitude.

Twenty bathythermograms, twenty surface salinity samples, and six 70-meter oblique plankton hauls were made in the waters north and west of Oahu.

Four night-light stations were conducted, two of which were inside Kingman Reef. On the second of the latter two stations, 5 tunalike juvenile fish were captured. Definite identification must await closer examination.

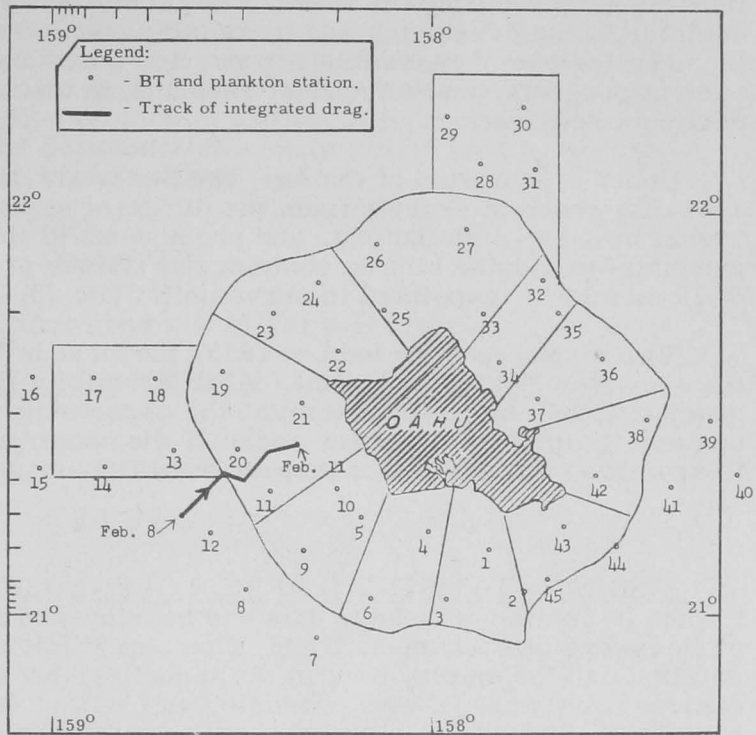
OCEANOGRAPHIC DATA COLLECTED BY "HUGH M. SMITH" (Cruise 32): The primary purpose of this cruise of the Pacific Oceanic Fishery Investigations vessel Hugh M. Smith was the collection of oceanographic data. The cruise period was February 1-11.

A total of 45 stations were occupied. Plankton collections at 0-60 M., 70-130 M., and 140-200 M. were made at each station using three 1-meter closing nets. At the first station after 2,000 hours each night, two additional collections were

made: (1) A 200-M. double oblique haul with the 10' Isaacs-Kidd mid-water trawl and (2) a 200-M. double oblique haul with a 1-meter open net. At each station surface water samples were taken for salinity determinations; a BT cast was also made at each station.

At each station water samples were taken to check the reliability of the PO_4 analysis of frozen sea water samples. These samples were in addition to the samples used in the shipboard determination of PO_4 .

The current-drag gear test was carried out satisfactorily with only minor changes needed in the gear. Five expendable drags were released and 3 of these were retrieved. See chart for course of the main drag. A satisfactory routine was developed for the plankton and trawl work to be done during cruise 33.



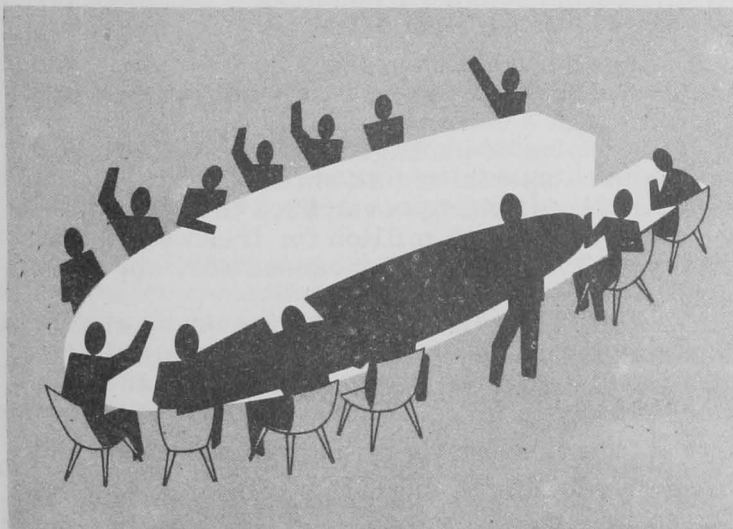
Station Pattern of Hugh M. Smith's Cruise 32, February 1-11, 1956.



Saltonstall-Kennedy Act Fisheries Projects

AMERICAN FISHERIES ADVISORY COMMITTEE TO MEET IN CALIFORNIA:

The third meeting of the American Fisheries Advisory Committee, authorized under the Saltonstall-Kennedy Act of 1954 will be held on May 1 and 2 in Long Beach, Calif., according to an announcement dated February 21 by Assistant Secretary of the Interior Wesley A. D'Ewart who will serve as presiding officer during the meeting.



The chief objective of the meeting will be to review the status of current fishery research and development projects being financed by Saltonstall-Kennedy funds and to discuss recommendations for next year's program. The program is now in the second year of operation.

The Saltonstall-Kennedy Act, approved on July 1, 1954, provides \$3 million annually, for three years, from duties on imported fishery products for the purpose of aiding the American commercial fishing

industry by promoting the free flow of domestically-produced fishery products in commerce and developing and increasing markets for these products. The Act authorizes the use of these funds to provide an educational service and market development program, and to conduct research in the fields of technology, biology, and related activities.

Under a provision of the Act, the Secretary of the Interior was authorized to appoint a group of experts from the different segments of the industry--fishermen, vessel owners, distributors, and processors of fish and fishery products and by-products--to advise him on commercial fishing problems. The committee consists of 19 members, appointed to serve until June 30, 1957.

Two meetings were held in 1955, the first in Washington, D. C., in April, and the second in Boston in August. A different city is selected for each meeting in order to give committee members the opportunity to study at first hand new developments in important fishery areas of the country. While in the Long Beach-San Pedro area, the group will inspect local fishery activities.

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FISHERY STATISTICAL OFFICE OPENED IN ANNAPOLIS: A statistical office for the collection of fishery data has been opened at Annapolis, Md., by the Branch of Commercial Fisheries, U. S. Fish and Wildlife Service. The office will collect detailed data on employment in the fisheries, number of craft and quantity of gear operated, catch of fishery products, and related information on the fisheries of Maryland. Establishment of this office will permit earlier release of data on the important fisheries of the Chesapeake Bay States.

Lloyd Johnson, formerly of the Fort Myers (Fla.) Statistical Office, will be in charge of the Annapolis Office.

This new office is being financed by funds provided by the Saltonstall-Kennedy Act of 1954 (68th Stat. 376).



Shrimp's Chief Retail Outlets are Frozen-Food Cabinets

The grocer's frozen-food display cabinet is the chief salesman for the shrimp industry based on dollar value, according to a recent survey. The survey, the first of its kind auditing shrimp retail sales and inventories on a national basis, was made by the U. S. Fish and Wildlife Service through a contract with the A. C. Nielsen Company during August and September 1955. Sales of packaged shrimp products from frozen-food display cabinets, including such specialties as shrimp cocktail, creole, sticks, and deviled shrimp, were estimated to average over \$5.6 million a month during the study period as compared with about \$5.2 million for fresh and bulk-frozen shrimp sold over the fish counter and \$1.4 million for canned shrimp.

Only about one-third of all grocery stores in the United States carry shrimp and shrimp products in their frozen-food display cabinets, although these stores do a large part of the nation's total retail food business. Retail distribution of frozen packaged shrimp products is confined mainly to large-volume stores. Fish-counter sales of fresh and bulk-frozen shrimp are confined to such stores even more so. At the time of the survey audit, even among stores normally carrying packaged frozen shrimp products, 25 percent were out of stock of breaded cooked shrimp, 12 percent of breaded uncooked shrimp, and 13 percent of "green" or fresh shrimp.

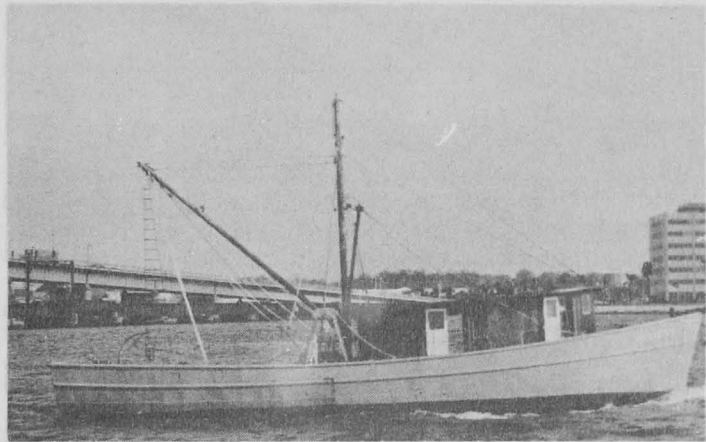
The survey is part of a comprehensive study the Service will make of the shrimp industry, including an examination of the potential market for shrimp products, the efficiency of processing plants in primary marketing, work practices on shrimp fishing vessels, cost of vessel operations, and other matters pertaining to the production, preparation, and distribution of shrimp and shrimp products. The project is financed by funds provided by the Saltonstall-Kennedy Act of 1954 to help the free flow of domestic fishery products into channels of trade.



South Atlantic Exploratory Fishery Program

CHARTERED VESSEL TO EXPLORE SOUTH ATLANTIC FOR SHRIMP: A new deep-water fishery exploration program in the Atlantic Ocean off the Carolinas, Georgia, and Florida, was initiated by the U. S. Fish and Wildlife Service, Assistant Secretary of the Interior Wesley A. D'Ewart announced February 28, Emphasis will be placed on shrimp exploration, primarily to see if there is a commercial supply of shrimp in deep water, but the work may provide valuable data on other species of fish.

The project will be carried out with the Service's recently-chartered vessel, the Pelican, which is scheduled to leave Jacksonville, Fla., February 29. The Pelican, steel-hulled and 73 feet long, has been used regularly for commercial shrimp fishing, and the vessel's operation is under the immediate direction of Donald Bates. The vessel, which will have a crew of four commercial fishermen, has been specially rigged for deep-water trawling with the installation of a winch holding 800 fathoms of wire rope.



The Pelican, a vessel recently chartered by the U. S. Fish and Wildlife Service for deep-water fishery explorations in the Atlantic Ocean off the coast of southeastern United States.

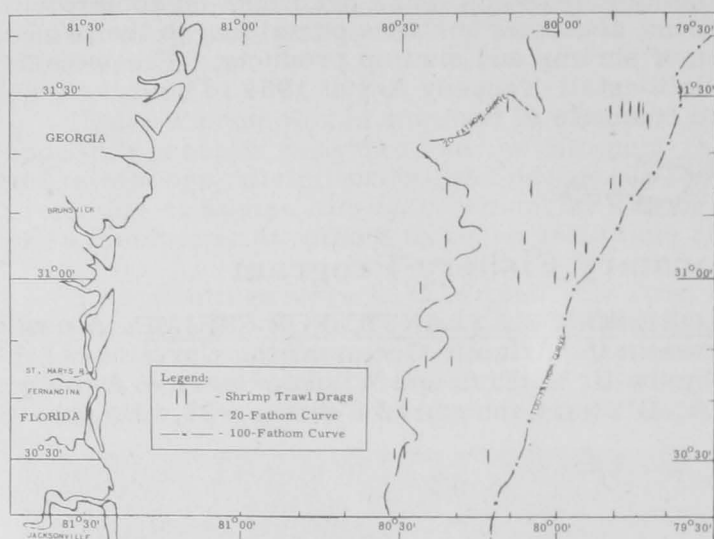
The Pelican is assigned to explore the Atlantic from Cape Hatteras, N. C., to Cape Canaveral, Fla. The exploratory work will be done in offshore waters ranging from 20 to 300 fathoms in depth. In some instances the Pelican will be as much as 90 miles offshore during the progress of the explorations.

The project is financed by funds provided by the Saltonstall-Kennedy Act of 1954 and is one of the activities recommended by the American Fisheries Advisory Committee named by Secretary Douglas McKay.

Shrimp fishing has been an important industry in the waters off the South Atlantic States for a number of years, but most of the fishing has been done in the comparatively shallow waters close to shore. Because of the fluctuations in the shrimp take in that area, many believe that the shrimp move periodically into the deeper water some distance from the land.

* * * * *

FIRST SHRIMP EXPLORATION TRIP COMPLETED BY "GEORGE M. BOWERS" (Cruise 1): Small numbers of rock shrimp (*Sicyonia brevirostris*) were taken



M/V George M. Bowers, Cruise 1, January 1956

over a wide offshore area between Jacksonville, Fla., and Savannah, Ga., during the first cruise of the U. S. Fish and Wildlife Service's exploratory vessel George M. Bowers, completed January 31, 1956. This was the first of a series of exploratory operations to determine species of shrimp present and the commercial fishing potential of the South Atlantic area.

The George M. Bowers used a 40-foot flat shrimp trawl to make 25 one-hour drags in the area between the 20- and the 50-fathom depth contours. The rock shrimp (21-25 count), a species with a hard lobster-like shell and not presently in commercial de-

mand, were caught in 17 drags. The catch ranged from individual shrimp to 2½ pounds (heads-on) per drag. Nine Trachypeneus sp., a member of the commercial shrimp family, were taken in 4 drags. None of the presently commercially-valuable species (white, pink, or brown shrimp) were taken.

Bottom conditions as observed by echo tracings and bottom samples indicated extensive trawlable sandy bottom between 20-30 fathoms. Between 30-50 fathoms the area was found to be generally rocky, rough, and to drop off steeply.

Several commercial species of flat fish were taken in 22 hauls. The principal species taken in these hauls were northern fluke (Paralichthys dentatus), ocellated fluke (Ancylopsetta quadracellata), and small-tailed flounder (Syacium micrurum?). The average weight of these fishes was approximately one pound.

During the regular trawling operations 8 tows were made with a cod-end cover attached to the trawl for escapement studies by a University of Miami Marine Laboratory cooperator aboard. No commercial species of shrimp were taken in these drags and the operation was discontinued.



Sport Fishing License Sales Set New Records

Sport fishing and wild-game hunting in the United States attracted enough new recruits during the fiscal year ended June 30, 1955, to establish a record of 33,046,361 paid license holders, an increase of 392,162 over the previous year, the Fish and Wildlife Service reported March 4 to Secretary of the Interior Douglas McKay.

In the enjoyment of these outdoor sports, hunters and fishermen spent nearly \$87 million for all types of hunting and fishing licenses, permits, tags, trout stamps, and Federal duck stamps.

Fishing, still the most popular sport, recorded 18,854,809 paid license holders, compared with 18,580,813 in fiscal year 1954.

In 1955, fishermen paid \$39,501,838 for all types of licenses and special permits, tags, and trout stamps. This is an increase of \$574,103 over the 1954 total of \$38,927,735.

State Fishing Licenses Issued in the United States, July 1, 1954, to June 30, 1955					
State	Paid Fishing License Holders			Total Licenses, Permits, Etc., Issued ^{1/}	Total Cost ^{2/} to Anglers for All Licenses Issued
	Resident	Non-Resident	Total		
Alabama	221,515	20,515	242,030	250,896	\$ 286,344
Arizona	94,874	48,054	142,928	142,928	379,294
Arkansas	264,415	133,978	398,393	398,393	752,514
California	1,271,038	11,942	1,285,980	1,285,980	3,847,275
Colorado	258,094	102,609	360,703	360,714	894,804
Connecticut	104,321	4,360	108,681	109,425	378,511
Delaware	9,756	1,636	11,392	11,392	24,465
Florida	266,413	102,483	370,896	370,896	969,658
Georgia	423,541	7,270	430,811	437,876	282,498
Idaho	183,319	65,929	249,248	254,508	706,089
Illinois	862,908	19,087	881,995	881,995	1,020,878
Indiana	584,275	39,442	623,717	642,923	705,062
Iowa	399,310	15,389	414,699	414,699	595,002
Kansas	213,267	5,766	219,033	219,033	448,071
Kentucky	327,956	77,968	405,924	405,924	861,405
Louisiana	187,832	29,450	217,282	217,282	282,876
Maine	136,750	74,308	211,058	211,058	642,475
Maryland	96,705	22,803	119,508	120,790	219,034
Massachusetts	221,664	6,289	227,953	242,356	659,222
Michigan	878,668	309,466	1,188,134	1,404,908	2,399,928
Minnesota	1,058,438	316,510	1,374,948	1,451,023	2,543,432
Mississippi	131,784	34,397	166,181	166,181	379,105
Missouri	540,984	51,741	592,725	592,725	1,341,086
Montana	178,244	38,207	216,451	216,451	482,972
Nebraska	223,219	10,559	233,778	232,778	366,477
Nevada	29,393	25,464	54,857	60,382	192,137
New Hampshire	81,822	51,116	132,938	136,697	437,300
New Jersey	138,624	9,838	148,462	230,611	584,261
New Mexico	61,369	32,020	93,389	97,412	241,099
New York	766,585	43,934	810,519	817,882	1,835,910
North Carolina	316,508	10,516	327,024	382,934	657,143
North Dakota	76,360	1,916	78,276	78,276	82,108
Ohio	830,103	47,813	877,916	877,916	1,747,877
Oklahoma	352,795	60,684	413,479	413,479	889,914
Oregon	291,115	27,092	318,207	318,342	1,169,232
Pennsylvania	706,079	33,955	740,034	740,034	1,880,228
Rhode Island	19,950	518	20,468	26,297	47,177
South Carolina	311,361	12,602	323,963	342,842	441,906
South Dakota	100,199	38,943	139,142	139,142	277,065
Tennessee	522,797	219,299	742,096	811,706	766,118
Texas	455,975	8,359	464,334	464,334	782,533
Utah	164,586	8,514	173,100	181,111	513,125
Vermont	75,207	34,335	109,542	109,644	253,487
Virginia	359,474	12,113	371,587	442,679	597,956
Washington	351,756	19,880	371,636	371,736	1,342,282
West Virginia	185,278	7,862	193,140	219,207	377,129
Wisconsin	759,381	326,337	1,085,718	1,112,213	2,342,478
Wyoming	113,766	56,144	170,180	176,568	587,288
TOTALS	16,211,767	2,643,042	18,854,809	19,625,387	\$39,501,838

^{1/}This includes general resident and non-resident fishing licenses, permits, tags, stamps, and such free licenses as distributed by some states.
^{2/}This is the gross cost to the fishermen for various types and categories of licenses issued by the respective states for the privilege of fishing for and/or possessing fishes.



A thrilling new sport that has sprung up in the past ten years is "skin-diving." This fascinating pursuit numbers nearly 2,000,000 active and enthusiastic participants who do their fishing under the water with spear or camera.

Resident fishing licenses accounted for 16,211,767 of the 18,854,809 total; nonresident licenses numbered 2,643,042.

The states to attract the greatest number of nonresident anglers were Wisconsin, Minnesota, Michigan, Tennessee, Arkansas, Colorado, and Florida, in that order. In Nevada, license sales to nonresidents amounted to 25,494 of their total of 54,887.

This is the second year a new system of reporting hunting and fishing license statistics has been used. As developed by the Service last year, the general licenses are segregated from the special licenses, permits, tags, stamps, etc. This eliminates duplications in the totals since a hunter may buy, in addition to his general license, a pheasant license-tag and a deer permit, or a fisherman may be required in some states to purchase a trout stamp.

The apportionment of Federal aid funds to the states for fish and wildlife restoration programs is based upon the number of paid license holders and not upon the total of all licenses and permits issued. For apportionment purposes in fiscal year 1957, the total in 1955 of 18,854,809 paid fishing license holders will be used in apportioning funds for fish restoration under the Dingell-Johnson program.

In the table, the data have been arranged in five columns. The first three columns cover, as nearly as can be determined, the number of paid license holders, consisting of resident, nonresident, and the total for each state. The fourth column presents an enumeration of all types of licenses issued by the states to sportsmen, such as general fishing licenses, and special types of issuances such as trout stamps, special area licenses, free licenses to the aged, veterans, etc., special gear permits (fish houses, etc.), and others. The numbers of these special licenses is indicative of the growing trend toward more highly specialized and regulated fishing. The fifth column gives the gross cost which sportsmen pay for the

right to indulge in their favorite sports. The totals in the fifth column include fees for the general licenses, and for all special permits, tags, and stamps.

Note: See Commercial Fisheries Review, April 1955, p. 47.



U. S. Foreign Trade

EDIBLE FISHERY PRODUCTS, DECEMBER 1955: United States imports of fresh, frozen, and processed edible fish and shellfish in December 1955 amounted to 56.4 million pounds (valued at \$17.2 million), according to a U. S. Department of Commerce summary (see table). This was a decrease of about 21 percent in quantity as compared with November 1955, but an increase of 14 percent over the imports for December 1954. The value of the December 1955 edible fishery products imports was 16 percent lower than November 1955, but 22 percent higher than December 1954. The dollar value in December 1955 works out to about 30.5 cents a pound as compared with 28.5 cents a pound in December 1954. Shrimp imports in December 1955 continued at a relatively high level.

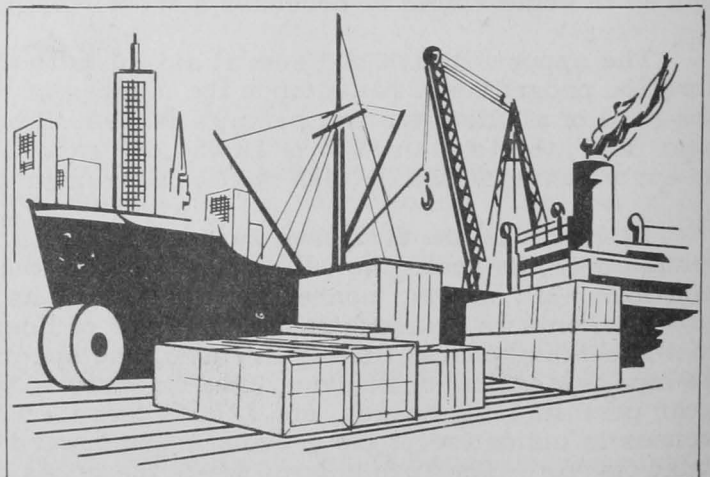
United States Foreign Trade in Edible Fishery Products, December 1955 with Comparisons						
Item	Quantity			Value		
	Dec.		Year	Dec.		Year
	1955	1954	1954	1955	1954	1954
Imports:	. (Millions of Lbs.) .			. . (Millions of \$) . .		
Fish & shellfish; Fresh, frozen, & processed ^{1/}	56.4	49.4	801.7	17.2	14.1	202.8
Exports:						
Fish & shellfish; processed ^{1/} only (excluding fresh and frozen)	9.9	6.2	50.8	2.0	1.3	13.2

^{1/} Includes pastes, sauces, clam chowder and juice, and other specialties.

were almost 60 percent higher than in December 1954. The value of these exports in December 1955 were 39 percent below November 1955, but 54 percent higher than the same month a year earlier.

GROUND FISH FILLET IMPORTS IN JANUARY 1956 ABOVE A YEAR AGO: Imports of groundfish (including ocean perch) fillets during January 1956 amounted to 15.5 million pounds. Compared with the imports for the same month of last year, this was an increase of 18 percent (see Chart 7 in this issue).

The increase was primarily due to considerably larger imports from Canada and Iceland, although less spectacular increases were noted from almost all of the other exporting countries as well. Canada and Iceland accounted for 91 percent of the total January imports. Other countries exporting groundfish fillets to the United States during the first month of the current year were Norway, Denmark, the Netherlands, West Germany, and Greenland.



The quota of groundfish (including ocean perch) fillets permitted to enter the United States at $1\frac{7}{8}$ cents per pound in the calendar year 1956 is 35,196,575 pounds compared with 35,432,624 pounds in 1955. Imports in excess of the quota enter at a duty of $2\frac{1}{2}$ cents a pound. Included in this category are imports of fillet blocks and slabs of these species.



Wholesale Prices, February 1956

The improvement in the production of groundfish and some flatfish varieties on the East Coast was reflected in the lower February 1956 index (113.7 percent of the

Table 1 - Wholesale Average Prices and Indexes for Edible Fish and Shellfish, February 1956 With Comparisons

Group, Subgroup, and Item Specification	Point of Pricing	Unit	Avg. Prices ^{1/} (\$)		Indexes (1947-49=100)			
			Feb. 1956	Jan. 1955	Feb. 1956	Jan. 1955	Dec. 1955	Feb. 1955
ALL FISH & SHELLFISH (Fresh, Frozen, & Canned)					113.7	122.3	112.6	101.8
Fresh & Frozen Fishery Products:					121.5	136.5	121.1	103.0
Drawn, Dressed, or Whole Finfish:					114.1	143.5	117.0	100.4
Haddock, lge., offshore, drawn, fresh	Boston	lb.	.09	.21	86.9	208.2	124.3	80.8
Halibut, West., 20/80 lbs., drsd., fresh or froz.	New York	lb.	.32	.29	97.5	89.2	85.1	79.4
Salmon, king, lge. & med., drsd., fresh or froz.	New York	lb.	.60	.60	134.3	135.4	133.1	119.7
Whitefish, L. Superior, drawn, fresh	Chicago	lb.	.73	.69	181.0	170.1	131.4	161.1
Whitefish, L. Erie pound or gill net, rnd., fresh	New York	lb.	-	.70	131.4	141.5	136.5	96.0
Lake trout, domestic, No. 1, drawn, fresh. . .	Chicago	lb.	.74	.64	150.6	131.1	132.2	133.2
Yellow pike, L. Michigan & Huron, rnd., fresh .	New York	lb.	.55	.50	129.0	117.3	102.0	123.1
Processed, Fresh (Fish & Shellfish):					127.6	133.7	124.1	104.3
Fillets, haddock, sml., skins on, 20-lb. tins . .	Boston	lb.	.32	.64	110.6	217.7	132.7	100.4
Shrimp, lge. (26-30 count), headless, fresh . . .	New York	lb.	.77	.75	121.7	118.5	113.4	91.7
Oysters, shucked, standards	Norfolk	gal.	5.62	5.50	139.2	136.1	136.1	120.6
Processed, Frozen (Fish & Shellfish):					116.5	117.6	114.2	97.4
Fillets: Flounder, skinless, 1-lb.								
pg.	Boston	lb.	.39	.40	102.1	104.7	104.7	104.7
Haddock, sml., skins on, 1-lb. pkg.	Boston	lb.	.30	.30	92.6	92.6	91.0	89.4
Ocean perch, skins on, 1-lb. pkg.	Boston	lb.	.29	.29	114.8	114.8	112.8	111.8
Shrimp, lge. (26-30 count), 5-lb. pkg.	Chicago	lb.	.78	.79	119.6	121.1	116.5	86.8
Canned Fishery Products:					102.4	102.2	100.5	100.0
Salmon, pink, No. 1 tall (16 oz.), 48 can/cs. . .	Seattle	case	21.70	21.70	120.0	120.0	114.8	109.6
Tuna, lt. meat, chunk, No. 1/2 tuna (6-1/2 oz.), 48 cans/ cs.	Los Angeles	case	11.80	11.80	85.1	85.1	85.1	93.0
Sardines, Calif., tom. pack, No. 1 oval (15 oz.), 48 cans/cs.	Los Angeles	case	7.12	7.00	83.2	81.7	81.7	85.2
Sardines, Maine, keyless oil, No. 1/4 drawn (3-1/4 oz.), 100 cans/cs.	New York	case	8.45	8.45	89.9	89.9	92.6	76.6

^{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.

1947-49 average) for all edible fish and shellfish (fresh, frozen, and canned). The improvement in the supply of groundfish, particularly haddock, was principally responsible for the decline of 7 percent from January to February, but the index for February 1956 was still 11.7 percent higher than for the same month in 1955.

The decrease of 20.5 percent from January to February in the drawn, dressed, or whole finfish subgroup index was due entirely to the sharp drop in ex-vessel

prices at Boston (drawn offshore haddock was down 58.3 percent). All other items included in this subgroup were either unchanged or from 5 to 15 percent higher. Compared with February 1955, the drawn, dressed, or whole finfish subgroup index this February was higher by 13.6 percent due to higher prices for all items, but the



At the Boston Fish Pier, after fish is unloaded from the hold of the fishing vessel and packed in boxes, it is hauled to the processor for filleting.

sharpest increase occurred in frozen dressed halibut prices which rose 22.8 percent because of the lighter supplies of frozen halibut available in 1956.

The fresh processed fish and shellfish subgroup index declined 4.6 percent from January to February, but was 22.3 percent higher than in February 1955. The drop from January 1956 to February 1956 was due primarily to lower prices for haddock fillets at Boston as prices for both fresh shrimp and oysters were up slightly. Stronger markets for fresh haddock fillets, shrimp, and oysters accounted for the higher prices this February as compared with a year earlier.

The processed frozen fish and shellfish February subgroup index changed only slightly from that of the previous month, but was up almost 20 percent above the same month in 1955. The increase between February 1956 and February 1955 was for all items in the subgroup except frozen flounder fillet prices which dropped about 2 percent. Frozen shrimp prices at Chicago this February were 37.8 percent above those for the same month a year earlier.

The canned fishery products subgroup index for February was about unchanged for January 1956, but was up 2.4 percent over February 1955. Production of canned fish during February 1956 was principally limited to tuna. Compared with February 1955, this February's substantially higher prices for the limited supplies of canned salmon and Maine sardines were offset almost entirely by the lower prices for the ample supplies of canned tuna and California sardines.

