

TRENDS AND DEVELOPMENTS

Additions to the U. S. Fleet of Fishing Vessels

A total of 42 vessels of 5 net tons and over were issued first documents as fishing craft during May 1955, according to the U. S. Bureau of Customs. This represents a decrease of 52 vessels (55 percent), compared with the 94 fishing craft reported for May 1954.

| Section | May | | Jan. - May | | Total 1954 |
|---------------------------|------------------------------|------|------------|------|------------|
| | 1955 | 1954 | 1955 | 1954 | |
| | (Number) | | | | |
| New England | - | 2 | 7 | 10 | 23 |
| Middle Atlantic | 3 | 6 | 8 | 8 | 15 |
| Chesapeake Bay | 4 | 19 | 15 | 47 | 93 |
| South Atlantic | 13 | 10 | 28 | 42 | 119 |
| Gulf | 6 | 33 | 35 | 186 | 313 |
| Pacific | 13 | 16 | 39 | 53 | 117 |
| Great Lakes | - | - | 2 | 3 | 6 |
| Alaska | 3 | 8 | 15 | 16 | 27 |
| Hawaii | - | - | 2 | 1 | 1 |
| Puerto Rico | - | - | - | - | 2 |
| Unknown | - | - | - | - | 1 |
| Total | 42 | 94 | 151 | 366 | 717 |

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

In the Gulf section only 6 vessels were documented as compared with 33 reported for May 1954--a decline of 82 percent. The South Atlantic and Pacific sections each had 13 additions, the Chesapeake Bay section 4, and the Middle Atlantic and Alaska sections each 3.

During the first five months of 1955 a total of 151 vessels was documented for the first time as fishing craft, compared with 366 for the corresponding period of last year--a decrease of 59 percent.



American Samoa

TUNA CANNERY CONTRACTS WITH JAPANESE FISHING COMPANY: In order to obtain a supply of frozen tuna for its American Samoa tuna cannery, the United States firm operating that cannery has concluded a contract with a Japanese firm, a May 26 U. S. Embassy dispatch from Tokyo reports. The contract runs from June 1 to December 1, 1955, and contemplates a target catch of 3,750 metric tons with a sales price to the canner of US\$275 a ton for albacore and US\$190 a ton for light-meat tuna.

The Saipan Maru, a refrigerated vessel of 3,737 gross tons, has been chartered from a Japanese firm and will be used as a floating refrigerating plant at Samoa to freeze the tuna caught and brought to it by 20 Japanese fishing vessels.



California

TUNA TAGGED BY CLIPPER "VIRGINIA R." (Cruise C-55-1): A total of 1,016 yellowfin tuna and 18 skipjack tuna were tagged by the commercial tuna clipper *Virginia R.* on a three-months' cruise off the coast of Mexico, El Salvador, and Nicaragua (see table). The tagging and other biological work was done by scientists of the California Department of Fish and Game. No big-eyed tuna were tagged on the

| Tuna Tagged by Virginia R., February 3 to April 30, 1955 | | | | |
|--|------------------|----------|----------|-------|
| Area | Yellowfin | Skipjack | Big-eyed | Total |
| | (Number of Fish) | | | |
| Mexico | 484 | 18 | 0 | 502 |
| El Salvador and Nicaragua | 532 | 0 | 0 | 532 |
| Total | 1,016 | 18 | 0 | 1,034 |

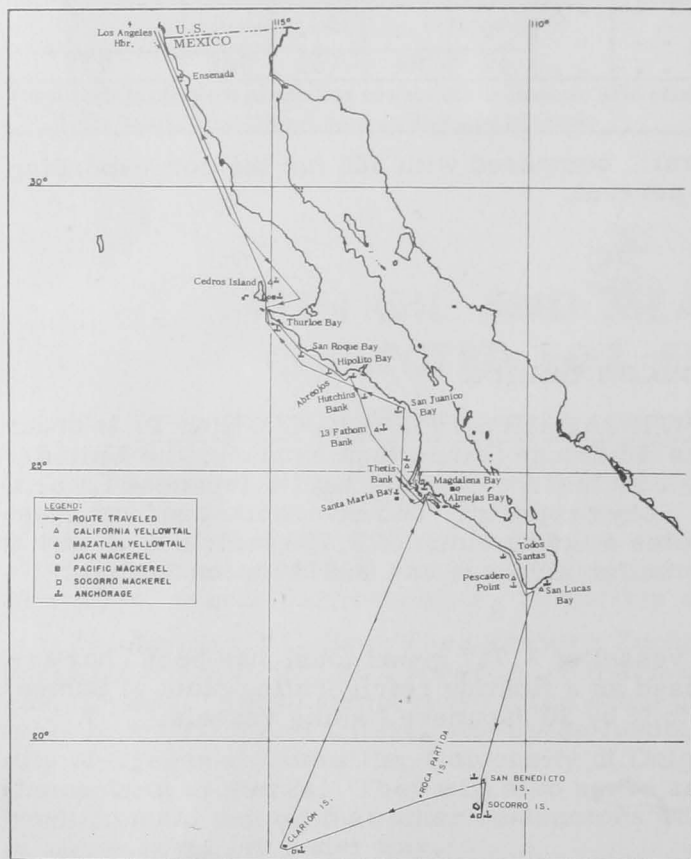
cruise. Type "G" spaghetti tags were used on all fish. A wet burlap sack placed over the head of the fish aided materially in expediting the tagging operations.

Weather observations and water temperature data were recorded at frequent intervals throughout the cruise.

Extensive night light collections yielded many specimens. Some fish were also taken from bait net and by hook and line.

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YELLOWTAIL TAGGED AND PACIFIC MACKEREL SPECIMENS COLLECTED OFF BAJA CALIFORNIA BY "YELLOWFIN" (Cruise 55-Y-3): A total of 211 yellowtail were tagged by the California Department of Fish and Game's research vessel *Yellowfin* on a one-month cruise off the coast of Baja California completed at Los Angeles May 1. Nearly 100 samples of Pacific mackerel from the Revilla Gigedo Islands for comparison with California Pacific mackerel were frozen for further study. Other biological objectives of the cruise were: to obtain specimens of black sea bass for special study; to collect algae specimens particularly from the new lava flow at San Benedicto Island; to further study the fish fauna of the Revilla Gigedo Islands; to collect various fish specimens, both live and preserved, for aquaria and scientific institutions.



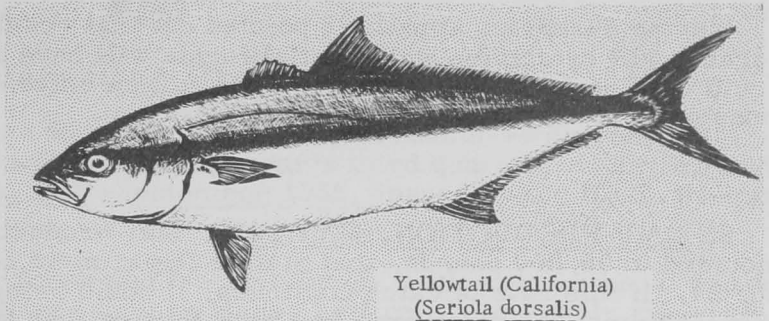
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Bait hauls were made at Los Angeles Harbor (prior to departure), Almejas Bay, and Cedros Island. Anchovies taken at Los Angeles Harbor lasted to Clarion Island. Thread herring were taken at Almejas Bay and small jack mackerel at Cedros Island. No sardines were observed at any station.

Cruise 55-Y-3 of the M/V *Yellowfin*.

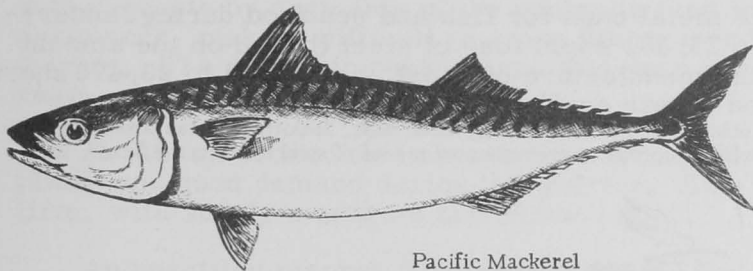
The vessel trolled various lures during all daylight hours when not at anchor. Shore collections were made at several localities. Gill nets and/or trammel nets were set at Socorro and Clarion Islands. Still fishing with live and cut bait was carried on at all anchorages. At all night anchorages a 1,500-watt light was placed over the side of the vessel to attract fish not ordinarily caught. Two drifting night light stations were made considerable distances from shore.

Water temperatures ranged from a low of 11.5° C. just south of Point San Eugenia to a maximum of 25.0° C. near Roca Partida. On the first leg of the trip temperatures remained below 18° C. until the vessel was more than halfway from Magdalena Bay to Cape San Lucas.



Yellowtail (California)
(*Seriola dorsalis*)

Of the 211 yellowtail tagged, 161 were taken in areas more southerly than previous tagging. Thirteen yellowtail were returned frozen for study at the Laboratory. Twenty-two were returned alive and given to Marineland of the Pacific.



Pacific Mackerel
(*Pneumatophorus diego*)

Thirty yellowtail specimens were preserved frozen for further study. Only three specimens of the Mazatlan yellowtail (from Panama) had been taken previously. Three live specimens were given to Marineland of the Pacific.

Good samples of Socorro mackerel were taken at both

Socorro and Clarion Islands. Nearly 100 were brought back frozen for further study.

Only 4 yellowfin tuna and 2 skipjack tuna were caught on the cruise. One small yellowfin was preserved whole and the stomachs of all the others were frozen for further analysis.

Measurements and counts on seven black sea bass were taken in conjunction with a special study being made. Forty-five spotfin croaker and 20 corbina were brought back frozen for study by the Dingell-Johnson Surf Fish Project. Weight-length and stomach analysis data were recorded for 22 wahoo. Upward of 20 species of fish were added to the known fauna of the Revilla Gigedo Islands. Several hundred frozen and preserved specimens were brought back for utilization by various interested institutions and individuals.

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RECORD PLANTING OF JAPANESE SEED OYSTERS: Results from the largest oyster-seed operation ever to take place in California were awaited with interest by commercial interests and State scientists, reports the April Outdoor California, a California Department of Fish and Game publication.

This great experimental planting by a California oyster company made in Arcata Bay north of Eureka, under conditions of hail, snow, sleet, rain, and high winds, followed receipt of 6,500 cases of seed oysters from Japan, the largest shipment ever received in California. Remainder of the tremendous shipment was planted in Drake's Estero and Tomales Bay in Marin County.

Marine Fisheries personnel reported that the new system of inspecting seed-oyster shipments in Japan, in cooperation with the State of Washington, greatly expedited the planting. An inspection for infestations of oyster drills on arrival would have delayed for two days planting of the highly perishable seed.

Marine Fisheries scientists pointed out that results from the Arcata planting probably will determine whether California will have a full-fledged oyster industry, or will continue with a moderate oyster culture only in the several bays north of Point Conception.

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SHRIMP PRODUCTION, MAY 1955: May production of shrimp in California amounted to 75,000 pounds, that State's Department of Fish and Game reported on June 24. If this rate of catch continues, it could bring the 1955 total well over last year. The major fishing area has been Bodega Bay, Marin County. Shrimp fishing in the Morro Bay area has been almost a total failure thus far this season.



Cans--Shipments for Fishery Products, January-April 1955



Total shipments of metal cans for fish and sea food during January-April 1955 amounted to 23,881 short tons of steel (based on the amount of steel consumed in the manufacture of cans), compared to 20,476 short tons in the same period a year earlier.

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 DEPARTMENT OF DEFENSE, MAY 1955: Fresh and frozen fishery products purchases for the military feeding of the U. S. Army, Navy, Marine Corps, and Air Force by the Army Quartermaster Corps in May 1955 amounted to 2.1 million pounds, valued at \$0.9 million (see table). This was a decrease of 4.6 percent in quantity and 3.4 percent in value as compared with April purchases. May 1955 purchases were about the same in quantity and value as in May 1954.

| Purchases of Fresh and Frozen Fishery Products by Department of Defense (May and the First Five Months of 1955 and 1954) | | | | | | | |
|--|------|------------|------|-----------------------------|------|------------|------|
| QUANTITY | | | | VALUE | | | |
| May | | Jan. - May | | May | | Jan. - May | |
| 1955 | 1954 | 1955 | 1954 | 1955 | 1954 | 1955 | 1954 |
| .. (Millions of Pounds) .. | | | | .. (Millions of Dollars) .. | | | |
| 2.1 | 2.1 | 10.8 | 9.1 | .9 | .9 | 4.6 | 3.9 |

Army Quartermaster Corps purchases of fresh and frozen fish during the first five months in 1955 totaled 10.8 million pounds (valued at \$4.6 million), higher by 19.3 percent in quantity and 19.1 percent in value as compared with the similar period a year earlier.

Prices paid for fresh and frozen fishery products by the Department of Defense in May 1955 averaged 43.1 cents per pound as compared with 42.5 cents in April and 42.1 cents in May 1954.

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. Therefore, actual purchases are somewhat higher than indicated, but it is not possible to obtain data on the local purchases made by military installations throughout the country.



Fishery Products Marketing Prospects, July-Sept. 1955

OUTLOOK: Steady markets for domestic fishery products--with some weakness due to local oversupply--are forecast for this year's third quarter, according to the Commercial Fisheries Outlook, July-September 1955, issued by the U. S. Fish and Wildlife Service early in July.

A firm market is seen for fresh and frozen salmon, with supply liberal and demand good. The market for canned salmon should be firm, with supply moderate and demand good. Mild-cured salmon is expected to show a firm market, a moderate supply, and a good demand.

An unsettled market is predicted for canned tuna, with supply liberal and demand good. An industry-Government promotional campaign to move liberal supplies of this product into trade channels reached a peak in June and public response has been good. Tariff concessions on imported tuna (effective in September) along with requests by segments of the domestic tuna industry for Federal Government assistance, make it difficult to gauge future trends in imports and the domestic market. The domestic pack of tuna this year is not expected to equal that of last year.

Fresh and frozen shrimp are expected to show firm markets, moderate supplies, and good demand during the quarter. The market for canned shrimp will be firm, with supply moderate and demand good.

An unsettled market, firming towards the end of the quarter, is seen for fish meal, with supply liberal and demand good. Supply will be bulwarked by the maximum production which takes place during this July-September period. With more cattle and hogs being fed, and broiler replacements above average, demand for fish meal should maintain a good level throughout the quarter.

Supply, demand, and market for other fishery items during the quarter are expected to be as follows:

| <u>Item</u> | <u>Supply</u> | <u>Demand</u> | <u>Market</u> |
|----------------------------|---------------------|---------------|---------------|
| <u>Salt-Water Fish:</u> | | | |
| Anchovies, canned | Moderate | Slow | Dull |
| Fish sticks | Moderate to liberal | Good | Steady |
| Flounder and sole | Moderate | Good | Steady |
| Cod | Moderate to liberal | Good | Steady |
| Haddock | Liberal | Moderate | Steady |
| Ocean perch | Moderate | Good | Firm |
| Pollock | Light | Good | Firm |
| Halibut | Liberal | Moderate | Unsettled |
| Herring, sea (salted) | Light to moderate | Moderate | Firm |
| Mackerel, fresh and frozen | Moderate | Good | Firm |
| Mackerel, canned | Light | Light | Unsettled |
| Rockfishes, Pacific Coast | Moderate | Slow | Dull |
| Sablefish (black cod) | Moderate | Good | Firm |
| Sardines, canned | Liberal | Dull | Unsettled |
| Swordfish | Liberal | Good | Firm |
| Whiting | Liberal | Good | Fairly |

| <u>Item</u> | <u>Supply</u> | <u>Demand</u> | <u>Market</u> |
|-----------------------------|---------------------|---------------|---------------|
| <u>Shellfish:</u> | | | |
| Clams, fresh | Light | Good | Steady |
| Crabs and crab meat, fresh | Moderate to liberal | Active | Firm |
| Crabs and crab meat, canned | Moderate | Good | Firm |
| Lobsters, northern | Liberal | Good | Steady |
| Lobster tails, spiny | Moderate | Good | Firm |
| Oysters, fresh shucked | Light | Slow | Dull |
| Oysters, canned | Moderate | Moderate | Steady |
| Scallops, sea | Liberal | Good | Unsettled |
| <u>Byproducts:</u> | | | |
| Fish oils | Liberal | Good | Steady |
| Fish solubles | Liberal | Moderate | Steady |

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MARKETING SITUATION AT MID-YEAR: An analysis of the fishery products marketing situation at mid-year, which 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 August 2 release of The National Food Situation (NFS-73), points out:

Consumption and Retail Prices: United States civilian per capita consumption of fishery products during the first half of 1955 was almost as large as that of a year earlier. Retail prices for fishery products, judging from wholesale price information, averaged somewhat lower than in the first half of last year.

Fresh and Frozen Fish: Landings of edible fish and shellfish by commercial fishermen during January-June totaled a little smaller than a year earlier. The sharp decline in the commercial landings of tuna was in large part offset by increases for several other fish.

Commercial freezings of fishery products in the United States and Alaska through June totaled 136 million pounds, 12 percent more than a year earlier. Freezings will continue to increase seasonally during the summer months, and for the year as a whole may total more than in 1954. Cold-storage holdings of frozen products on July 1 amounted to almost 140 million pounds, down 1 percent from those on the same date last year. Holdings of frozen fishery products will trend upward during the remainder of the year as supplies are built up for distribution during the winter of 1956.

Foreign Trade: Imports of important edible fishery products (excluding fresh and frozen tuna for canning) through the first half of this year probably were somewhat lower than a year earlier. During the first five months of 1955 receipts of major fresh and frozen fish from abroad were about 15 percent larger than in the same part of 1954. However, imports of canned sardines, salmon, and tuna were sharply lower this year. The decline in imports of the major types of canned fish is in large part a consequence of the larger domestic packs in 1954 and the larger stocks carried over into 1955.

Exports of important species of canned fish through April were much larger this year than last. Exports of canned Pacific sardines were five times the very low volume of a year earlier, and canned salmon exports were up more than a half.



Gulf Exploratory Fishery Program

"OREGON" CATCHES LARGE YELLOWFIN TUNA IN GULF (Cruise 31): A total catch of 29 large yellowfin tuna was made by the Service's exploratory fishing vessel Oregon in the north central Gulf of Mexico during June 4-14. In general, fishing was poor. The yellowfin, averaging 149 pounds each, were caught in 10 long-line sets with an average of 300 hooks a set. Gonad examination revealed the fish were in spawning condition. This was the second half of Cruise 31 which was interrupted due to the necessity of having the vessel in Pascagoula during June 1-3 for inspection of the electrical system.

Of the 10 sets, 4 were made beyond the 1,000-fathom curve and yellowfin tuna were caught at the rate of 0.8 tuna per 100 hooks with no shark mutilation. The remaining 6 stations were made on the slope over depths of 550 to 1,000 fathoms and yellowfin were caught at a rate of slightly over 1 per 100 hooks. One-third of the catch was badly mutilated by sharks. Of interest was the capture of 3 large yellowfin on a night set off the Mississippi Delta.

In addition to the yellowfin catch, 48 sharks, 55 dolphin, 4 white marlin, 1 blue marlin, 1 sailfish, 2 blackfin tuna, and 1 little tuna were caught on the long lines. Three marlin were tagged and released in cooperation with the Woods Hole Oceanographic Institution.

The first half of the cruise (May 19-31) was spent dragging in the north-east gulf to gain basic information on the problems of bottom trawling in very deep water. Heavy seas greatly restricted fishing activities. However, a 40-foot trawl was successfully dragged down to depths of 1,150 to 1,200 fathoms. A single 40-basket set of long-line gear was made 60 miles southeast of the Mississippi Delta and caught 3 large yellowfin tuna.



Cruise 31 of the M/V Oregon.

Juvenile tuna were collected at night-light dip-net stations during the June leg of the trip. Trolling lines were run during daylight hours while the vessel was under way. However, only one little tuna was captured.

The Oregon was scheduled to leave Pascagoula on July 5. Due to the necessity of having the Oregon in Pascagoula during June 1-3 to permit inspection of the vessel's electrical system, the work scheduled for Cruise 31 was rescheduled for Cruise 32. This cruise has been planned to provide additional information on the presence of commercially-valuable stocks of red shrimp (*Hymenopenaeus robustus*) in the deep waters of the Florida Straits. A series of exploratory shrimp-trawl drags in depths of 170 to 250 fathoms south of Dry Tortugas in April 1954 yielded promising catches of red shrimp.

Additional red shrimp explorations will be carried out in areas of apparently good trawling bottom southeast of Cay Sal Bank. The Oregon was scheduled to return to Pascagoula on July 27.

Maine

SARDINE INDUSTRY LAUNCHES SUMMER-FALL PROMOTION: Consistent newspaper consumer advertisements in 136 cities and radio spots (on a several-times-a-day schedule over more than 200 high-power stations) will highlight the Maine sardine industry's summer-fall promotional campaign for canned Maine sardines.

In announcing details of the program, which started July 10; the Executive Secretary of the Maine Sardine Industry said that, in general, the coverage was national in scope but that the greatest advertising concentration would be in the Middle Atlantic, Southern, and Midwestern states.

An extensive grocery, restaurant, and institutional trade-press schedule plus service to food editors and point-of-sale merchandising activities will also be used.

The advertising theme will be based on the advantages to housewives offered by canned sardines from Maine and the more than 100 brands of oil, mustard, and tomato-sauce sardines produced by the State's 40 plants will be featured.

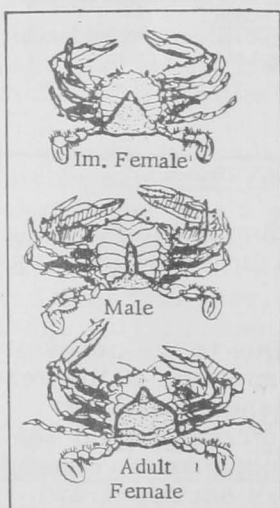
"Our packers, along with all food manufacturers, are in the midst of the greatest competitive battle in history and consistent advertising is one of the chief ways in which we are meeting the challenge," the Executive Secretary said on July 7. "Distribution is no problem as 520,000 of the nation's 575,000 grocery outlets stock sardines from Maine. Our job is to get the public to buy them more often," he added.



Maryland

WHEREABOUTS OF BLUE CRABS IN CHESAPEAKE BAY DURING SPRING:

The movements and locations of the various stages of the blue crab (*Callinectes sapidus*) are not generally well understood, reports the May 1955 Maryland Tidewater News, a Maryland Department of Research and Education publication. The whereabouts of the small crabs, sponge crabs, large or "Jimmie" crabs and, of course, the soft crabs, are of interest to fishermen. The small crabs, progeny of last year's spawners, can be found almost anywhere in Chesapeake Bay and its tributaries in the spring. Large numbers of these juvenile crabs have even been found in the heads of tidewater streams and rivers this spring, indicating that these crabs are able to withstand wide ranges of salinity. They have been taken, for example, as much as 50 miles above the mouth of the Patuxent River in relatively fresh water. Most of these juveniles will enter the soft and peeler-crab fishery in midsummer, while some may enter the hard-crab fishery in the fall.



Shape of "Apron" varies with sex and age.

Sponge crabs in Maryland waters are usually scarce in the spring, since the peak spawning period falls around June 15. Maryland, in any case, does not have a large population of these egg-bearing crabs owing to the lack of high-salinity waters. Research indicates that the larvae are unable to develop in waters where the salt content is much below that of the ocean. Virginia, on the other hand, in May had a tremendous population of crabs about to spawn. These are concentrated in the southern part of the Bay near the Capes. During the 1955 season the area from the York River southward harbors the greatest numbers of these individuals.

The large males are found during May and early June in the deeper parts of the Bay and rivers. After their journey north during their first year, they remain scattered throughout the Bay and its tributaries. Local movements take place while the crabs are feeding or mating, but the males do not make large-scale migrations as do mature females in the fall. Fishermen believe these overwinter in a state of semihibernation in the deepest holes and channels. As the water warms, they begin to move into more shallow areas to feed. Thus in May they are found in 15 to 40 feet of water. Crab pots are set at these depths and take the major portion of the catch at this season. Later the crabs will move even farther shoreward and become available to the trot liners and sport crabbers.

Soft and peeler crabs are also widely distributed, although they are not common in deep water. The grassy flats, weedy sloughs, creeks, and river shores all furnish the necessary protection for the growing crab which is about to begin its first shedding of the season. Peelers which shed in these protected areas spend the critical soft period in seclusion and safety. Fish, birds, and man, and even other crabs, all prey upon the soft or peeler crab for both food and, in the case of man, fishing bait. Primary areas for catching soft and peeler crabs commercially are Tangier Sound, Pocomoke Sound, Fishing Bay, and Honga River.

The Maryland crabber has learned to adjust his fishing techniques to the biology and movement of crabs. This he has learned from experience and from knowledge handed down from generation to generation. Crabs in almost all stages are present in springtime and are easily observed. The commercial waterman depends upon his ability to know where the different stages are, their relative abundance, and the best time and method for catching them. Many crabbers move their gear every week, basing their moves on previous experience, knowing how the effects of climate and weather affect the location and behavior of crabs.

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OVER 2 MILLION OYSTER SHELLS TO BE PLANTED: Over 2 million bushels of oyster shells will be planted by the Maryland Department of Tidewater Fisheries on the public bars of the State this year, reports the Chairman of that Department.

The Department has an annual appropriation of \$250,000 for oyster propagation, plus laws which require that every packer must return 50 percent of the shells he has made to the State for planting on the bars.

The State of Maryland in some years makes some seed available to private oyster farmers. After the middle of April seed in the St. Mary's River was made available for purchase. A tax of 50 cents per bushel was charged by the State and the planter in addition had to pay tongs for catching the seed. Only a limited number of growers made purchases since the percentage of shells was high and the count of oysters low.



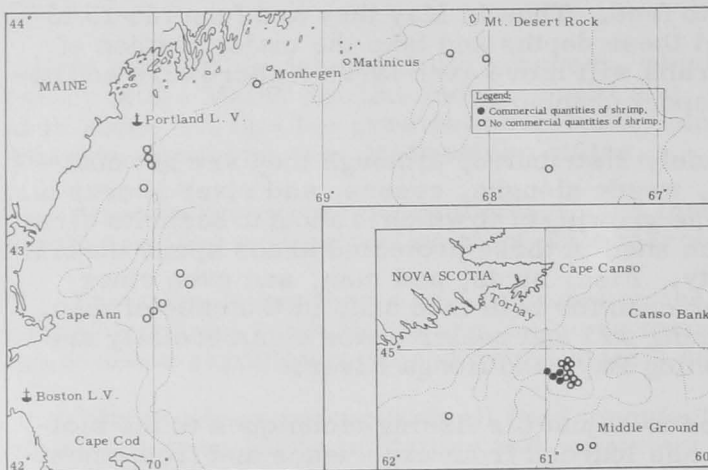
Michigan

SEA LAMPREY CONTROL WORK INCREASED: Michigan's sea lamprey control work will be nearly tripled during the coming fiscal year, reports a recent bulletin from the Michigan Department of Conservation. The Michigan legislature appropriated \$29,000 for weirs, research, and other work to battle the fish predator. About \$10,000 was appropriated in the previous fiscal year.



North Atlantic Fisheries Exploration and Gear Research^{1/}

NORTHERN SHRIMP CAUGHT IN COMMERCIAL QUANTITIES OFF NOVA SCOTIA BY "DELAWARE" (Cruise 6): Commercial quantities of northern shrimp (*Pandalus borealis*) were caught off the coast of Nova Scotia but not in the Gulf of



M/V Delaware Exploratory Cruise 6, May 31-June 10, 1955.

A total of 29 tows was made--16 were made off the coast of Nova Scotia, while 13 were made in the Gulf of Maine. Gear used was a fine-meshed No. 36 shrimp trawl, and a No. 41 balloon trawl, with a fine-meshed liner in the cod end.

The largest catch was made in tow No. 15 when 502 pounds were taken. The shrimp caught were "clean" and not mixed with much trash. Average length of the shrimp caught in this tow was 89 mm. (3.5 inches), which is slightly less than the average size of those taken in the former Maine fishery.

Samples of brine-frozen shrimp were turned over to five fish-processing companies for determination of marketability; and one sample was turned over to the Harvard Biological Laboratory for use in research on hormonal control of activity in crustacea.

The Delaware is scheduled to depart on Cruise 7 on June 20 for a 12-day cruise to continue the reconnaissance of the fishery resources on the edge of the Continental Shelf south of Georges Bank.

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COMMERCIAL QUANTITIES OF OCEAN PERCH AND WHITING TAKEN BY "DELAWARE" IN DEEP WATER (Cruise No. 7): Only in the eastern portion of the survey area (the edge of the continental shelf, south of Georges Bank, westward to due south of Nantucket) were commercial quantities of ocean perch (*Sebastes marinus*) and whiting (*Merluccius bilinearis*) taken by the Service's exploratory fishery vessel Delaware on Cruise No. 7. Poor catches were made in the western portion. The twelve-day cruise, which ended July 1 at East Boston, was the fourth in a series designed to explore the availability of bottom species on the edge of the continental shelf, in waters deeper than are ordinarily fished commercially.

The gear used was a No. 41 standard trawl, and a No. 41 balloon trawl. Tows (a total of 41) were made in the depth range 100 to 420 fathoms, with intermediate

^{1/} Formerly known as the "New England Exploratory Fishery Program."

Maine by the Service's exploratory fishing vessel Delaware on an 11-day cruise that ended at Boston June 9. This was the fifth cruise of a series designed to discover the reasons for the failure of the Maine fishery for northern shrimp.

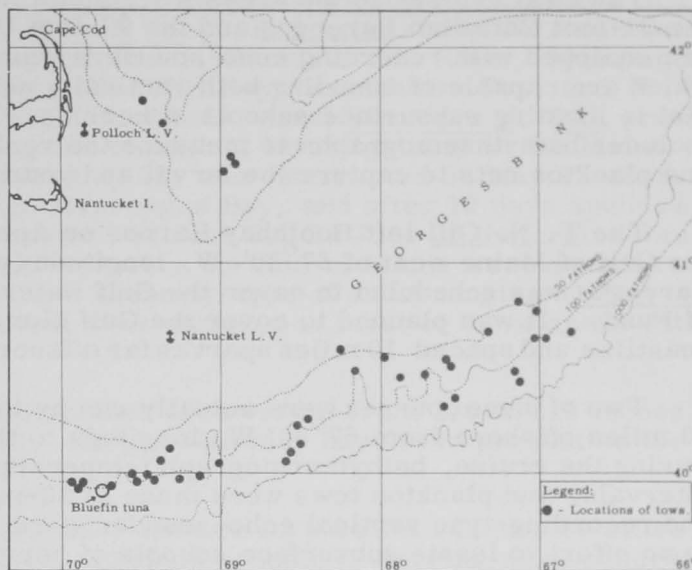
It has been hypothesized that the distribution of northern shrimp might have shifted north as a consequence of the warming of bottom waters which has occurred in recent years. Therefore, exploratory fishing was conducted not only on the former fishing grounds in the Gulf of Maine, but to the northeast as well.

tows successively at 150, 200, 250, 300, and 350 fathoms.

The western portion of the survey area proved unproductive of groundfish. The American lobster (*Homarus americanus*) was not as abundant as in other areas of the continental shelf.

A total of 1,000 pounds of bluefin tuna (*Thunnus thynnus*) were taken by handlines on June 28. The fish were observed feeding on squid escaping through the meshes of the trawling net. Size of the tuna ranged from 15 to 60 pounds. Location of the catch was latitude $39^{\circ}55'$ N., longitude $69^{\circ}45'$ W. (see chart).

A sample of bluefin tuna was turned over to a local processor for experimental purposes. Thirty-two live lobsters were turned over to the Massachusetts Division of Marine Fisheries for marking and release.



M/V Delaware Exploratory Cruise 7, June 22-30, 1955.



North Atlantic Fisheries Investigations

HADDOCK EGGS AND LARVAE STUDIES CONTINUED BY "ALBATROSS III" (Cruise 61): In order to determine the distribution of haddock eggs and larvae, temperature and salinity, and the general circulation pattern, the Service's research fishing vessel *Albatross III* made a cruise to Georges Bank, Browns Bank, Gulf of Maine, and Southern New England Banks. The cruise commenced May 16 and was completed May 28 at Woods Hole, Mass.

Over 3,000 miles of continuous plankton tows were made at the surface and 10 meters with Hardy Plankton Recorders. A total of 266 bathythermograph lowerings, 136 salinity samples, and 18 surface tows with the standard meter net were made. Seventeen samples of eggs were hatched out for identification purposes. A total of 672 drift bottles were released throughout the area.

Witch flounder, cusk, rockling, haddock, cod, whiting, yellowtail, and mackerel eggs; and lance, haddock, eel, hake larvae and post larvae were found. Haddock larvae were found in the South Channel, 30 miles south of Block Island, and off Gay Head.



North Atlantic Herring Research

JOINT U. S. - CANADIAN INVESTIGATION OF HERRING RESOURCES LAUNCHED BY "T. N. GILL" (Cruise 1) AND "HARENGUS:" Both the Fisheries Research Board of Canada and the U. S. Fish and Wildlife Service are investigating the herring resources of the Gulf of Maine and the Bay of Fundy. Because of a common interest, some parts of the investigations are being coordinated. The research cruises are planned jointly so that no overlapping of effort occurs.

The first cruises in the areas were made in April. Two vessels were used--the 84-foot Canadian Harengus and the 97-foot United States T. N. Gill, both of which are equipped with recording echo-sounders which sound vertically and "Sea Scanars" which are capable of sounding both vertically and horizontally. These devices assist in locating subsurface schools of herring. Other special equipment on both ships includes bathythermographs to measure the vertical gradation in water temperature and plankton nets to capture the larval and young herring floating in the water.

The T. N. Gill left Boothbay Harbor on April 20 to investigate the waters of the Gulf of Maine west of 67°30' W. longitude (west of Englishman Bay). The Harengus was scheduled to cover the Gulf waters east of this meridian and the Bay of Fundy. It was planned to cover the Gulf along a series of courses parallel to the coastline and spaced 10 miles apart as far offshore as time and weather would permit.

Two of these courses were actually run by the T. N. Gill at distances of 5 and 10 miles offshore from 67°30' W. longitude to the southeastern tip of Cape Cod. During the cruise, bathythermograph temperature records were taken at 10-mile intervals, and plankton tows were made at 30-mile intervals. The "Sea Scanar" and recording-type vertical echo-sounder were run continuously 24 hours per day in an effort to locate subsurface schools of herring.

Small scattered schools were indicated both on the "Sea Scanar" and the recording sounder at 5 miles offshore in Cape Cod Bay near Provincetown. While positive identification was not made, the schools made sounder markings characteristic of small herring schools.

A scattering of surface-swimming fish was observed near the Boston Lightship during the nights of April 21 and April 22.

This cruise was cut short on April 24 due to failure of the propulsion engine of the T. N. Gill. The work will be continued as soon as the vessel is repaired.

The Harengus sailed from Digby, Nova Scotia, on April 18 and carried out similar investigations in the Bay of Fundy and to the west of Nova Scotia.

Two large schools of herring were located during the cruise, the first on April 25 about 10 miles NNW. from Petit Passage, Digby County, in the Bay of Fundy, and the second on April 27 about 65 miles W. by S. of Yarmouth, Nova Scotia. No other indications of large herring were seen, although larval herring were taken frequently in the plankton tows.

Cruise 2 of the T. N. Gill was due to start on May 23. The primary objective of this cruise was to explore the inshore waters of the Gulf in an attempt to gain information on the distribution of herring at this season. It was also planned to make several runs to a distance of 100 miles offshore to give some coverage of the outside waters which could not be sounded during Cruise No. 1 as had been planned. Plankton collections and water temperature records were to be made as part of the program to describe the biology of the Gulf of Maine herring.

It was planned to sound all the navigable bays and inlets along the Gulf from Passamaquoddy Bay to Cape Ann, using a "Sea Scanar" and a vertical echo-sounder. Several types of fishing gear designed for sampling herring schools were to be tried out. These include a bait seine of the small lampara type, a six-foot lift net, and a small mid-water trawl.

A radio report will be given from the vessel when any good-sized schools of herring are located. These reports will be broadcast at 3 p.m. E.D.T. on 2638 kilocycles.

* * * * *

SMALL HERRING SCHOOLS LOCATED IN INSIDE WATERS BORDERING GULF OF MAINE BY "THEODORE N. GILL" (Cruise No. 2): Extensive schools of small herring were located in Casco Bay, Sheepscot River, Damariscotta River, Muscongus Bay, St. George River, Penobscot Bay, Blue Hill Bay, Frenchman Bay, and Machias Bay during the second cruise of the Service's vessel Theodore N. Gill, presently being used in exploratory fishing and biological investigations on the Maine herring fishery. The cruise started on May 23, was interrupted on May 27 when the vessel struck a submerged rock in Muscongus Bay, and after 12 days spent repairing the damage, the cruise was resumed on June 9. On June 20 the cruise was completed. Most of the inside waters bordering the Gulf of Maine were sounded with a recording echo-sounder and with a scanning-type of echo-ranging device. The extensive schools of herring located were sampled in most of these areas with a lampara seine.

The average size of the fish taken in each area varied from 2.0 to 2.6 inches, fork length (tip of nose to fork of tail). Larger fish may have been present on the bottom in deeper waters.

Four runs were made offshore and back inshore on parallel courses 30 miles apart to a distance of 75 miles offshore. Surface schools of herring were observed 18 miles west of Cape May, Nova Scotia, and at distances of 18, 42, and 57 miles southeast by south of Mount Desert Island.

Traces of scattered schools of fish were indicated at various points throughout the Gulf in midwater and on the bottom. Some of these deeper-lying schools may have been herring, but positive identification could not be made.

Radio broadcasts were made at 3 p.m. daily on 2638 kc. while the vessel was in operation, giving the results of each day's work.

The Theodore N. Gill, sailed on June 27, 1955, on the third of a series of cruises presently being made in the Gulf of Maine and adjacent inside waters in an attempt to ascertain the seasonal distribution of herring populations. As in the previous two cruises, the waters will be sounded with recording-type and scanning-type echo-sounding devices.

The principal objective of this third cruise is to sound for herring schools in the outside waters within approximately 10 miles of the shoreline and in the inside waters of the numerous bays and inlets along the Gulf coast east of Cape Ann. Attempts will be made to catch samples of schools sounded with a lift net or a lampara seine in order to determine the average size of the fish. Plankton tows and water temperature recordings will be made as in previous cruises as part of the long-range program to define the stocks and determine the life history of the Atlantic herring.

Radio broadcasts will be made at 3 p.m. daily, giving the results of each day's work. The cruise is scheduled for completion on July 8.



North Pacific Exploratory Fishery Program

"JOHN N. COBB" TO SEARCH FOR SALMON IN OFFSHORE WATERS OF NORTH PACIFIC: To obtain information on the high-seas distribution, abundance, life history, racial composition, etc. of North Pacific salmon in the Gulf of Alaska and adjacent offshore waters of the North Pacific, the Service's exploratory fishing vessel John N. Cobb left Seattle on June 23. Scheduled to return about September 20, the vessel will also catch salmon on the high seas in condition for tagging; col-

lect salmon from various localities for studies of racial determination, size composition, age analysis, and other related data; and make oceanographic observations in connection with the fishing activities. A series of predesignated stations will be worked extending from off Northern Vancouver Island to off Unalaska Island, Alaska.

The primary fishing gear will be nylon gill nets of various mesh sizes designed to catch both mature and immature salmon. A series of east-west transects will be run across the Gulf of Alaska with fishing stations at 60-mile intervals. Special attention will be given to an area southeast of Kodiak Island which is reported to be rich in plankton. A limited amount of experimental fishing will be done with surface long lines and trolling gear in addition to the gill nets.

Scientific personnel from the Branch of Fishery Biology and from the Department of Oceanography, University of Washington, will participate in the research. All salmon caught in suitable condition will be tagged and released. Morphometric measurements, stomach analyses, blood samples, and other biological data will be obtained. Oceanographic observations, including water samples, temperatures, etc., will be taken at each fishing station and at other regular intervals.

This is a part of the research program approved by the International North Pacific Fisheries Commission. Liaison will be maintained when possible between the John N. Cobb and other research vessels operating in nearby waters. Information obtained will be coordinated with that of other agencies carrying out research on North Pacific salmon.



Oceanic Research Unit Set Up by Service in California

A new oceanic research project by the U. S. Fish & Wildlife Service will begin on September 1 and will be based at Stanford, Calif. O. E. Sette, Director of the Service's Pacific Oceanic Fishery Investigations in Honolulu, T. H., since 1948, is being transferred to the West Coast to head the important new oceanic research project, Acting Secretary of the Interior Davis announced June 22. Under the direction of Sette, the unit will conduct a study to relate fishery production to climate and ocean conditions. The relations between variations in ocean circulation and the

sudden and as yet unexplained appearances and disappearances of commercial fish stocks from the customary fishing grounds will be studied on a broad scale. The work will be of a pioneering nature in three fields of science--fishery biology, oceanography, and meteorology.



Dr. A. L. Tester

O. E. Sette

The ultimate purpose of the project, according to Service Director John L. Farley, is to discover the natural laws governing fluctuations in abundance of our great commercial fisheries. "Such laws, if they exist and are discovered," he said, "would probably have a general application and as profound an effect on world progress in fishery science as did Newton's laws of motion in mechanics or Ohm's law in electricity."

The Service Director explained that the need for such a study has been demonstrated by the fact that many of our important sea fisheries are subject to large,

unexpected and sometimes catastrophic failures. Recent advances in oceanography and meteorology, however, suggest that the abundance of fish may be greatly affected by large-scale changes in the weather pattern. If the study of ocean-wide events, as they may be related to worldwide weather fluctuations, discloses the causes of major fishery fluctuations, then it may be possible to predict future fluctuations.

Sette has been selected to head the new project because of his extensive experience in both fishery and oceanographic studies. He has been with the Fish and Wildlife Service and its predecessor agency, the Bureau of Fisheries, since 1924. From that date until 1929 he was chief of the division now known as the Branch of Commercial Fisheries. From 1929 to 1937 he conducted marine fisheries investigations on the Atlantic coast. During the period from 1937 to August 1948 he conducted studies on the sardine fishery from headquarters at Stanford University in California. During World War II he was detailed as Area Coordinator of Fisheries for California. He has been director of the P.O.F.I. research since 1948. Mr. Sette recently returned from Italy where he served as one of the United States delegates to the International Technical Conference on the Conservation of the Living Resources of the Sea, which convened at Rome on April 18.

Sette will be succeeded in Honolulu on July 1 by Dr. Albert L. Tester who, as senior professor of zoology at the University of Hawaii, has been in charge of the University's fishery education and research program since 1948.

Tester was born in Toronto, Ontario, Canada, and acquired United States citizenship in 1954. From June 1931 to August 1938, he was associated with the Pacific Biological Station of the Fisheries Research Board of Canada, located at Nanaimo, B. C. Since joining the University of Hawaii in 1948, Tester has worked closely with the P.O.F.I. staff.

The P.O.F.I. program was authorized by the 80th Congress to conduct fishing explorations and necessary related oceanographical, biological, technological, statistical, and economic studies to insure maximum development and utilization of the high seas fishery resources of the Territories and island possessions of the United States in the tropical and subtropical Pacific Ocean and intervening areas.



Saltonstall-Kennedy Act Fisheries Projects

SERVICE COMPLETES COMMITMENT OF FIRST YEAR'S FUNDS: "The American commercial fishing industry is now in a better position to realize its production and marketing potential than at any previous time in its long history," Acting Secretary of the Interior Clarence A. Davis declared June 30 when he announced the signing of contracts totaling \$705,000 for fishery research and market development projects.

These new contracts, between the U. S. Fish and Wildlife Service and college and research organizations, complete the commitment of the \$3 million authorized for fiscal year 1955 under the Saltonstall-Kennedy Act (P.L. 466, 83d Congress). This legislation, designed to promote trade in domestically-produced fishery products, provides that an amount equal to 30 percent of duties collected under the customs laws on fishery products shall be transferred annually for three years from the Department of Agriculture to the Department of the Interior.

Expanded production and the development of new markets for fishery products are expected to result from this coordinated Government-industry program which has been drafted to produce practical results for the industry in the shortest possible time.

Acting Secretary Davis commended the American Fisheries Advisory Committee for its assistance in the research and development program. "The advice and counsel given to us by this group of experts from the commercial fishing industry for the best use of Saltonstall-Kennedy funds has been of inestimable value in getting this program off to such a splendid start," Davis said. "We look forward to working in close partnership with this Committee."

The Advisory Committee consists of 19 representatives of all segments of the United States fishing industry from all sections of the country.

The final contracts signed for fiscal year 1955 include the following projects:

Salmon: A study of the effect of predation on the mortality of Alaska salmon in their stream and ocean environments; with the Alaska Department of Fisheries, \$25,000 for one year. Voracious fishes, birds, and marine mammals are known to destroy large quantities of salmon. Information gained from this study will serve as the basis of policies regarding the reduction of certain predator populations for the sake of improving the abundance of salmon. This contract brings salmon-research activities under the Saltonstall-Kennedy Act to a total of about \$215,000 for the 1955 fiscal year.

North Atlantic Trawl Fishes: An investigation of climatic and oceanographic factors influencing the abundance and distribution of Atlantic fish populations; with the Woods Hole Oceanographic Institution, Woods Hole, Mass., \$200,000 for three years. With previous allocations of about \$270,000 for North Atlantic activities, this contract brings the total to about \$470,000.

Gulf of Mexico: A biological study of the Florida sponge grounds and the extent and density of the sponge population supporting the industry which operated in extra-territorial waters; with the University of Miami Marine Laboratory in Florida, \$20,000 for one year. An epidemic-wasting disease has twice (1938-39 and 1948-49) seriously reduced the quantity of marketable sponges. Effective biological management of the sponge fishery and administration of the Federal Sponge Law are dependent upon reliable biological data. Previous allocations of about \$53,000 were made for biological research in the Gulf of Mexico primarily on the study of causes and control of toxic red tide on the Florida west coast.

Publications: Publication of a much-needed volume on fishery biology which will contain in easily referenced tabular form data already collected on certain species for such items as chemical composition, temperature tolerances, salinity preferences and tolerances, breeding habits, average life spans, and mortality rates; with the National Academy of Sciences in Washington, D. C., \$15,000.

Middle Atlantic Oysters: Research on oyster drills (marine snails) which cause millions of dollars in losses each year to the oyster crop; three contracts for \$83,989. One of these contracts (for \$24,000 extending for three years) has been signed with the Virginia Fisheries Laboratory to study the life history of oyster drills. Under a three-year contract with the University of North Carolina (for \$16,844), a comparative study will be made of the structure and functions of the snail's drilling organs to develop control possibilities. A third three-year contract with the Oyster Institute of North America (for \$43,145) will center on experimental salt-water pond cultivation of oysters and clams under protected conditions. Approximately \$65,000 was previously allocated for study of oyster predators and seed oysters.

Channel Catfish: Development of improved techniques for the propagation of channel catfish which is a choice one in the Midwest, South, and Southeast; with the University of Oklahoma, \$20,300. Commercial fish farms have attempted to rear these catfish to meet stocking demands but have failed for lack of knowledge about the fish and its requirements.

Gulf of Mexico Explorations: Overhaul of the electrical system on the exploratory fishing vessel Oregon which operates in the Gulf of Mexico; with the Gulf Marine Ways, Inc., Pascagoula, Miss., \$39,000.

Gear Development and Research: Purchase and outfitting of a gear research vessel to replace the Pompano at Coral Gables, Fla.; \$70,000. Such a vessel is needed to conduct experiments with new and improved types of fishing gear, underwater television, electronic devices, and other methods of locating and catching fish designed to increase the efficiency of commercial fisherman.

Development of Voluntary Standards: An educational and training film showing the application of voluntary Federal standards and conditions to the inspection and grading of fish and fishery products, with Lee Productions, New York, N. Y., \$12,000. A study of the principal characteristics of breaded shrimp as now commercially packed; with the University of Massachusetts at Amherst, \$14,898. Development of grades and standards for natural sponges to aid in the marketing of this product; with the University of Florida at Gainesville, \$6,000. A study for improvement in methods of freezing skipjack tuna at sea; with the California Fish and Game Commission, \$10,000. A study of the modification of fish oils by chemical treatment and the testing of these products for applications in such industrial products as coatings, water-proofings, and improved surface finishes; contract with Arthur D. Little, Inc., Boston, Mass., a commercial research organization, for \$16,500 is pending. Other standards work so far undertaken is being financed with allocations of about \$100,000.

Commercial Fishery Economic Studies: A study of the economics of fish distribution on the Pacific coast to determine: (1) consumption and prices of different varieties of fish in the major Pacific coast consuming centers and (2) the market potential for fish in the Pacific coast States; with Oregon State College at Corvallis, \$50,000 for 18 months. The project will undertake to survey major fish-consuming markets in California, Oregon, and Washington to determine sources of supply, marketing channels and practices, and prices.

A study of the fishing industry's hull and protection and indemnity insurance problems; with Boston University, Boston, Mass., \$50,000. A contract is now under negotiation. Rates and premiums for this insurance have reached phenomenal levels in many segments of the industry. Vessel operations on all coasts have been hampered by this condition. Recommendations resulting from the project should lead to better operating conditions under present insuring methods or new and better insuring methods, both of which should result in lower insurance costs for commercial fishermen. These contracts bring to a total of \$243,000 the economic studies being conducted under the Saltonstall-Kennedy Act in fiscal year 1955.

Marketing of Fishery Products: A study of the marketing of fishery products in the metropolitan areas of Philadelphia, Cleveland, St. Louis, Detroit, Baltimore, Atlanta, Minneapolis-St. Paul, and Houston, to determine local consumption of and marketing practices for fishery products; with A. J. Wood & Co., a market research firm, \$24,950. This is a field in which information is almost totally lacking. The study is expected to provide background for the orderly expansion of market news, statistics, and economic coverage, and also reveal information on the possibility of expanding the sale of fishery products in those areas.

Expansion of Education and Market Development Activities: The replacement of the Fish and Wildlife Service's educational motion picture prints; \$24,000 has been earmarked for this project. Heavy circulation of these Service-supervised productions has caused such deterioration that it is necessary to replace many of the prints and obtain a larger number of copies in order to meet distribution demands. Preparation of a group of fishery educational exhibits for use at national conventions; \$10,000 has been set aside. Preparation of an educational motion picture on nutritive values of fishery products; with Lee Productions, New York, N. Y., \$13,000

has been allocated. This film will give the general public a better understanding of the dietary advantages to be gained by eating fish and shellfish. Previous allocations for educational and market development activities amounted to about \$255,000.

In placing all of these new contracts, the Fish and Wildlife Service has tried to avail itself of the most experienced groups active in each particular field, and located where contract research, Service research, and industry assistance could be best integrated.

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SERVICE TO SURVEY FISHING VESSEL INSURANCE PROBLEMS: A nationwide survey aimed at bringing about lower insurance rates for domestic fishing craft by reducing losses was announced July 19 by Secretary of the Interior McKay. The survey will be conducted by Boston University's Bureau of Business Research under the supervision of the U. S. Fish and Wildlife Service. It is the latest in a series of projects made possible by the Saltonstall-Kennedy Act--designed to aid the United States fishing industry through research and development.

Preliminary work is now under way by virtue of a Government contract whereby \$50,000 was made available to the university on June 30 for operations to extend over a period of 18 months. Personal interviews with insurance people will reveal premium incomes, claim payments, expenses, and profit or loss. Interviews with vessel owners will bring forth information on loss experiences.

Some of the more important questions to be asked in the survey are: (1) What are the effects of present conditions in the insurance field upon the economic situation in the fishing industry? (2) What is the frequency and severity of losses? (3) What relation do present expenditures for safety have to total cost of operation? (4) Why have many domestic insurance companies withdrawn from the field? (5) What are the problems of safety equipment and safety education in the fishing industry and can insurance costs be reduced by safety work? (6) What role can labor unions play in the solution of the problem? (7) Is there a need for new and expanded insurance programs? (8) Has there been (and is there still) a reluctance on the part of fishing craft owners to install safety equipment and establish safety rules?

While the scope of the survey has been determined by the Fish and Wildlife Service, the actual operations will be administered by James W. Kelley, Director of the University's Bureau of Business Research, Professor Warner C. Danforth of the Bureau (directly in charge of the work), and Professor R. H. Blanchard of Columbia University who will serve as a special consultant.

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SHRIMP MERCHANDISING PRACTICES STUDIED BY SERVICE: A nationwide survey of merchandising practices in the shrimp industry was launched June 22 when Department of the Interior officials met with representatives of the A. C. Nielsen Company (marketing research firm under Government contract to carry out the work), Acting Secretary of the Interior Davis announced June 22.

The survey will be supervised by the U. S. Fish and Wildlife Service which let the \$13,784 ten-month's contract in implementing provisions of the Saltonstall-Kennedy Act. This Act, created in the 83d Congress and signed into law by President Eisenhower last year, is designed to "promote the free flow of domestically produced fishery products in commerce."

Research aimed at improving sales and distribution of shrimp products through wholesale and retail marketing channels will be the principal feature of the survey.

Consumer-preference tests also will be conducted in New York City, Chicago, Harrisburg (Pa.), and Waterloo (Iowa).

The Service will coordinate this work with other studies of the shrimp industry being conducted with Saltonstall-Kennedy Act funds. Contracts previously let by the Service for economic research into the industry have resulted in the following activities: accountants of the Federal Trade Commission are currently engaged in cost studies of shrimp-vessel and shrimp packing plant operations; the research firm of Harwell, Knowles and Associates is making a general study of shrimp-vessel efficiency; work practices on shrimp vessels and operating efficiency in shrimp processing plants are being studied by the First Research Corporation of Florida; and the University of Miami's bureau of business and economic research is probing the problems of primary shrimp marketing and ex-vessel sales.

Other aspects of the shrimp industry are being studied by Fish and Wildlife Service specialists on a noncontract basis. These aspects include the historical development of our domestic fisheries; potential fishery resources; demand for shrimp products; domestic and foreign markets; foreign competition; and differences between retail and fishermen's prices. The objectives of these studies are: to reduce operating costs of vessels and plants through technical advances; to increase consumption through improved distribution, product quality, and merchandising; and to effect an output that will assure maximum total income.

The United States shrimp industry--one of the most lucrative of all our commercial fishing enterprises--produces about 225 million pounds of shrimp annually valued at around \$50 million, according to Service estimates. The industry provides a livelihood for approximately 15,000 fishermen and contributes to the income of another 15,000 employees in 600 shore establishments. Shrimp are distributed domestically by 1,500 wholesale firms and 170,000 retail stores.

* * * * *

SERVICE OPENS TWO NEW FISHERY STATISTICAL OFFICES: A statistical office for the collection of fishery data was recently opened at Pascagoula, Miss., by the Branch of Commercial Fisheries, U. S. Fish and Wildlife Service. Activities of the Pascagoula office will include the collection of detailed data on employment in the fisheries, number of craft and quantity of gear operated, the catch of fishery products, and the collection of related data in the vicinity of Pascagoula. Detailed statistics on the shrimp fishery will be obtained for that area in connection with the Service's expanded program for the collection of shrimp statistics. Donald T. Montgomery will be in charge of the office.

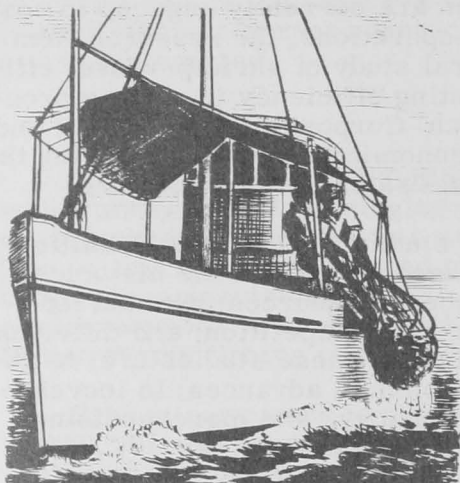
Another statistical office for the collection of fishery data has been opened at Providence, R. I. Activities of the Providence office include the collection of detailed data on employment in the fisheries, number of craft and quantity of gear operated, the catch of fishery products, and the collection of related data in Rhode Island and Connecticut. The office will also cooperate with the Rhode Island Department of Agriculture and Conservation Division of Fish and Game in the preparation of a monthly bulletin on the landings of fishery products in Rhode Island. Francis Riley, who has been in charge of the Provincetown, Mass., statistical office of the Branch, will be in charge of the Providence office.

These projects are being financed by funds provided by the Saltonstall-Kennedy Act (68th Stat. 376).



Status of Long Island Oysters

Because of the comparatively light sets of oysters occurring in Long Island Sound since 1945 and because of the heavy damage to the crops caused by several severe hurricanes passing over the Sound, the oyster industry entered the 1955 season with a relatively small reserve of oysters. It was hoped, nevertheless, that this summer would be one of heavy set to enable the industry to build up its resources. Whether this hope will be justified was impossible to predict, according to Bulletin 2, released June 3 by the Service's Biological Laboratory at Milford, Conn.



Hauling oysters aboard a Long Island dredger.

The history of the industry shows that good oyster sets in the open waters of Long Island Sound are not too frequent. Examination of the records available showed that in the last 55 years only 6, or perhaps 7, good general sets occurred in the Sound. The remaining years were either complete failures or so-called marginal years during which heavy sets occurred only in certain rather limited areas.

At times a good heavy general set did not occur for many years in succession. For example, it is known from examination of the records that such was the period of 21 years extending between 1904 and 1925. However, even after that prolonged period of poor setting the industry quickly recovered after the set of 1925 increased the oyster population of the Sound manyfold.

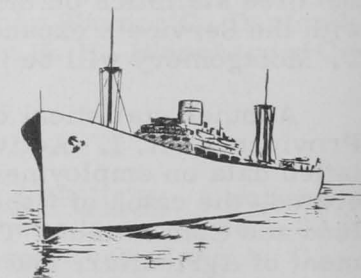


U. S. Foreign Trade

EDIBLE FISHERY PRODUCTS, APRIL 1955: United States imports of fresh, frozen, and processed edible fish and shellfish in April 1955 amounted to 57.2 million pounds (valued at \$14.7 million), according to a Department of Commerce summary tabulation (see table). This was a decrease of 25 percent in quantity and 21

| Item | Quantity | | | Value | | |
|--|--------------------|------|-------|------------------|------|-------|
| | Apr. | Year | | Apr. | Year | |
| | 1955 | 1954 | 1954 | 1955 | 1954 | 1954 |
| | (Millions of Lbs.) | | | (Millions of \$) | | |
| Imports: | | | | | | |
| Fish & shellfish: fresh, frozen, & processed ^{1/} . . . | 57.2 | 76.7 | 801.7 | 14.7 | 19.6 | 202.8 |
| Exports: | | | | | | |
| Fish & shellfish: processed ^{1/} only (excluding fresh and frozen) . . | 9.0 | 3.2 | 50.8 | 2.6 | 0.7 | 13.2 |

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



percent in value as compared with March imports of 76.7 million pounds (valued at \$18.5 million). Compared with a year earlier, April imports were down 25 percent in quantity and 25 percent lower in value.

Exports of processed edible fish and shellfish (excluding fresh and frozen) in April 1955 totaled 9.0 million pounds (valued at \$2.6 million)--an increase of 27 percent in quantity and 63 percent in value as compared with March exports of 7.1 million pounds (valued at \$1.6 million). April exports were higher by 181 percent in quantity and 271 percent in value as compared with a year earlier.



Wholesale Prices, June 1955

Good demand and a moderate supply were responsible for the sharp rise in wholesale prices of edible fishery products from May to June. The over-all index of edible fish and shellfish (fresh, frozen, and canned) in June 1955 was 103.7 percent of the 1947-49 average (see table)--5.7 percent higher than in May and 6.5 percent above June 1954.

Table 1 - Wholesale Average Prices and Indexes for Edible Fish and Shellfish, June 1955 with Comparisons

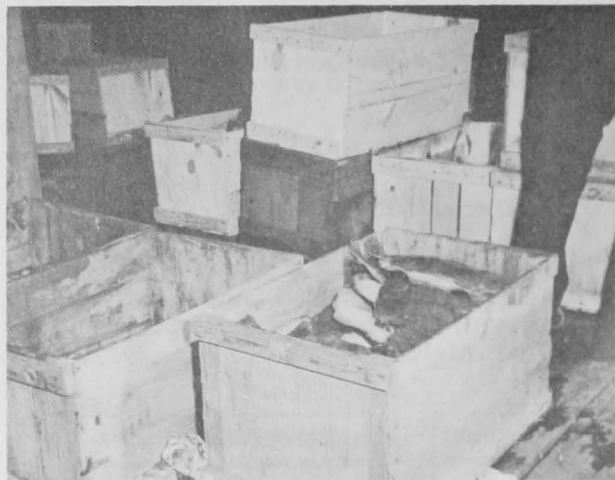
| Group, Subgroup, and Item Specification | Point of Pricing | Unit | Avg. Prices ^{1/} (\$) | | Indexes (1947-49=100) | | | |
|---|------------------|------|--------------------------------|----------|-----------------------|----------|-----------|-----------|
| | | | June 1955 | May 1955 | June 1955 | May 1955 | Apr. 1955 | June 1954 |
| ALL FISH & SHELLFISH (Fresh, Frozen, & Canned) | | | | | 103.7 | 98.1 | 98.7 | 97.4 |
| Fresh & Frozen Fishery Products: | | | | | 107.4 | 97.9 | 98.1 | 98.8 |
| Drawn, Dressed, or Whole Finfish: | | | | | 101.3 | 85.6 | 89.1 | 98.1 |
| Haddock, lge., offshore, drawn, fresh | Boston | lb. | .09 | .06 | 87.5 | 57.6 | 64.2 | 59.8 |
| Halibut, West., 20/30 lbs., drsd., fresh or froz. | New York | lb. | .24 | .22 | 74.3 | 68.1 | 68.1 | 100.6 |
| Salmon, king, lge. & med., drsd., fresh or froz. | New York | lb. | .58 | .50 | 129.2 | 111.8 | 112.4 | 140.5 |
| Whitefish, L. Superior, drawn, fresh | Chicago | lb. | .49 | .57 | 120.2 | 141.3 | 179.7 | 105.4 |
| Whitefish, L. Erie pound or gill net, rnd., fresh | New York | lb. | .68 | .73 | 136.5 | 146.6 | 151.6 | 91.0 |
| Lake trout, domestic, No. 1, drawn, fresh | Chicago | lb. | .53 | .47 | 107.6 | 96.3 | 141.4 | 99.4 |
| Yellow pike, L. Michigan & Huron, rnd., fresh | New York | lb. | .44 | .40 | 103.8 | 93.8 | 64.5 | 89.1 |
| Processed, Fresh (Fish & Shellfish): | | | | | 111.6 | 108.5 | 105.2 | 100.7 |
| Fillets, haddock, sml., skins on, 20-lb. tins | Boston | lb. | .32 | .25 | 107.2 | 85.1 | 88.5 | 74.8 |
| Shrimp, lge. (26-30 count), headless, fresh | New York | lb. | .71 | .69 | 111.4 | 108.6 | 101.1 | 94.8 |
| Oysters, shucked, standards | Norfolk | gal. | 4.63 | 4.63 | 114.4 | 114.4 | 114.4 | 114.4 |
| Processed, Frozen (Fish & Shellfish): | | | | | 103.2 | 95.6 | 95.3 | 97.6 |
| Fillets: Flounder (yellowtail), skinless, 1-lb. pkg. | Boston | lb. | .39 | .38 | 106.1 | 99.5 | 110.0 | 100.8 |
| Haddock, sml., skins on, 1-lb. pkg. | Boston | lb. | .26 | .26 | 81.6 | 80.0 | 86.3 | 100.4 |
| Ocean perch, skins on, 1-lb. pkg. | Boston | lb. | .27 | .27 | 106.7 | 106.7 | 111.8 | 116.8 |
| Shrimp, lge. (26-30 count), 5-lb. pkg. | Chicago | lb. | .67 | .59 | 103.4 | 91.0 | 84.1 | 84.1 |
| Canned Fishery Products: | | | | | 98.3 | 98.3 | 99.4 | 95.4 |
| Salmon, pink, No. 1 tall (16 oz.), 48 can/cs. | Seattle | case | 10.70 | 20.70 | 109.6 | 109.6 | 109.6 | 99.1 |
| Tuna, lt. meat, chunk, No. 1/2 tuna (6-1/2 oz.), 48 cans cs. | Los Angeles | case | 12.50 | 12.50 | 90.1 | 90.1 | 91.6 | 95.5 |
| Sardines, Calif., tom, pack, No. 1 oval (15 oz.), 48 cans/cs. | Los Angeles | case | 7.55 | 7.55 | 88.1 | 88.1 | 85.2 | 2/ |
| Sardines, Maine, keyless oil, No. 1/4 drawn (3-1/4 oz.), 100 cans/cs. | New York | case | 6.70 | 6.70 | 71.3 | 71.3 | 76.6 | 74.0 |

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

^{2/}Not available.

Ex-vessel prices for large dressed haddock at Boston, and prices of western halibut and salmon at New York were up, causing a substantial increase (18.3 percent) in the drawn, dressed, or whole finfish subgroup index from May to June. Haddock landings at Boston were light due to a tie-up of part of the offshore fleet. The June 1955 prices for lake trout and yellow pike were higher than in May while

whitefish prices were considerably lower. Compared with June 1954, prices for haddock and the fresh-water varieties were considerably higher, and prices for halibut and salmon were lower.



A box of fluke sorted immediately after landing at the dock of a wholesale plant in Hampton, Va.

level. When compared with June 1954, frozen fish and shellfish prices in June 1955 were 5.7 percent higher, but the individual items varied--flounder fillets and shrimp prices were higher while prices for fillets of haddock and ocean perch were lower.

All canned fish prices in June were the same as in May. The over-all index for canned fishery products in June 1955 was 98.3 percent of the 1947-49 average, 3.0 percent below a year earlier due to higher salmon prices. Canned tuna and Maine sardine prices were lower in June 1955 than a year ago.



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- Jan. 1942 - "Pasteurization of Crab Meat - Part I"
- Feb. 1942 - "Pasteurization of Crab Meat - Part II"
- Mar. 1942 - "Retailing Fresh Fish in Five Cities of the Upper Ohio River Valley"
- May 1942 Supplement - "The Alaskan King Crab"
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