



TRENDS AND DEVELOPMENTS

California

PACIFIC MACKEREL FISHING OUTLOOK DISMAL: Pacific mackerel fishing off the California coast has slowed up considerably and purse seiners have been catching only a few loads of small young fish hatched in 1953. Most of these fish would not normally have laid their first eggs until 1956. California marine biologists say that as long as the fishery continues to operate on such young fish the hope for recovery of the Pacific mackerel is most dismal, according to the June Outdoor California, a Department of Fish and Game bulletin.

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COMMERCIAL FISHING LICENSE SALES DOWN IN 1953/54: The sales of commercial fishing licenses in California have dropped for the fourth consecutive year, according to the June Outdoor California, a Department of Fish and Game bulletin. A total of 11,367 licenses were issued for the 1953/54 series--a decrease of 31 percent from the 1949/50 high of 14,967 licenses.



Cans--Shipments for Fishery Products, January-May 1954



Total shipments of metal cans for fish and sea food during January-May 1954 amounted to 29,842 short tons of steel (based on the amount of steel consumed in the manufacture of cans), compared to 33,257 short tons for the same period last year.

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 1954: 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 1954 amounted to 2,125,243 pounds, valued at \$894,789

Table 1 - Purchases of Fresh and Frozen Fishery Products by Department of Defense (May and the First Five Months of 1954 and 1953)

QUANTITY				VALUE			
May		January-May		May		January-May	
1954	1953	1954	1953	1954	1953	1954	1953
Lbs.	Lbs.	Lbs.	Lbs.	\$	\$	\$	\$
2,125,243	3,124,176	9,071,418	8,951,048	894,789	1,183,404	3,896,689	4,308,587

(table 1). This was an increase of 16.4 percent in quantity and 18.6 percent in value as compared with April purchases, but lower by 32.0 and 24.4 percent, respectively, than in May 1953.

Prices paid for fresh and frozen fishery products by the Department of the Army in May 1954 averaged 42.1 cents per pound as compared with 46.9 cents in April.

June 1954: The Army Quartermaster Corps in June 1954 purchased 2,966,264 pounds (valued at \$1,191,632) of fresh and frozen fishery products--39.6 percent greater in quantity and 33.2 percent higher in value than purchases in May (table 2). When compared with a year earlier, June purchases were down 36.2 and 29.8 percent, respectively.

QUANTITY				VALUE			
June		January-June		June		January-June	
1954	1953	1954	1953	1954	1953	1954	1953
Lbs.	Lbs.	Lbs.	Lbs.	\$	\$	\$	\$
2,966,264	4,648,870	12,037,682	13,599,918	1,191,632	1,696,864	5,088,321	6,005,451

Army Quartermaster Corps purchases of fresh and frozen fish during the first six months of 1954 amounted to 12,037,682 pounds (valued at \$5,088,321)--a decrease of 11.5 percent in volume and 15.3 percent in value as compared with the similar period in 1953.

An average price of 40.2 cents per pound was paid by the Department of the Army for fishery products purchased in June 1954, compared with 43.7 cents per pound in June 1953.



Fillet and Fish Stick Advertising Test

A joint fish fillet and fish stick advertising test program in Columbus, Ohio, in the fall of 1954 was agreed upon by firms in Canada, Iceland, Norway, and the United States. Agreement was reached at a meeting in Boston, Mass., August 5. The purpose of the test will be to determine how successful such a joint program is in increasing the consumption of fish fillets and fish sticks.



Film to Show Role of Outboard Motors in Fishing Industry

Work on an educational motion picture featuring the use of outboard motors in commercial fishing operations has been started by the U. S. Fish and Wildlife Service.

The film is being produced by MPO Production, Inc., New York City, for the Outboard, Marine and Manufacturing Co., Milwaukee, with Fish and Wildlife Service specialists serving as technical advisors, helping in the selection of locations, and participating in the preparation of the script.

Cited as an excellent example of teamwork between industry and Government, the project is designed to acquaint commercial fishermen and the general public with the important role outboard motors play in getting high-quality sea foods and fresh-water fish to the American dinner table.

The following commercial fishing operations have been selected by the Service as likely material for the film: 1. Lobster and sardine fishing in Maine. 2. Scallop fishing in Massachusetts. 3. Oyster harvesting in Maryland, or Virginia. 4. Clamming in New Jersey. 5. Crabbing in North Carolina, or Louisiana. 6. Mullet fishing in Florida. 7. Shrimping in Louisiana. 8. Salmon fishing in Alaska. 9. Pound or gill netting for herring, lake trout, and whitefish in the Great Lakes. 10. River fishing for shad, carp, and other fish in the Hudson or the Mississippi rivers.

The picture will be a 16 mm. sound and color production with a showing time of about 25 minutes. Due to the seasonal nature of commercial fishing, the film will require about 18 months for completion. A wide distribution of prints for public showings and television use is planned.



Fishery Products Marketing Prospects, July-October 1954

CONSUMPTION AND RETAIL PRICES: U. S. civilian consumption of fishery products per person during the first half of 1954 was slightly smaller than a year earlier. The reduction came mostly in canned fish. Consumption of frozen fishery products was maintained at the year-ago rate in large part due to expansion in the use of frozen "fish sticks." Retail prices of fish and shellfish, as a group, averaged close to those of the first half of 1953, judging from wholesale prices in principal markets. Civilian consumption of fishery products in the next few months is not expected to differ much from the rate of a year earlier, while retail prices for these commodities probably will be about the same.

CATCH: Commercial landings of fish and shellfish through about midyear were at least as high or perhaps slightly higher than in the same months of 1953. Heavier landings of tuna fish this year than last was the outstanding feature in the over-all production situation during the first half of 1954. Total landings of fishery products are close to the seasonal peak, and will decline as winter approaches.

FREEZINGS AND HOLDINGS: Commercial freezings of fishery products in the United States and Alaska through the end of June totaled 112 million pounds, only one percent higher than in the first half of 1953. Cold-storage holdings of frozen fish and shellfish on June 30 totaled 140 million pounds, slightly less than a year earlier. Although the volume of fishery products frozen will be declining seasonally as the year progresses, total cold-storage stocks (which include imports) will continue to build up during the fall. The out-of-storage movement of frozen fishery products is generally heaviest during the winter months when landings are at the low point for the year.

CANNED FISH: Less canned fishery products are available now than last summer, but the 1954 packs will start moving to market in volume in a few weeks. Tuna is the only popular canned fish item for which a large pack is in prospect for this year. Thus far in 1954 more tuna has been canned than a year earlier, and indications are that it will continue ahead of last year unless the volume of imports of frozen tuna or of domestically caught tuna landed for canning drops sharply. The canned salmon pack probably will decline for the third year in a row because of the shortage of pink salmon in the Puget Sound area and conservation restrictions on fishing in some Alaskan waters. The size of the packs of mackerel and California sardines (pilchards) probably will be small again this year.

FOREIGN TRADE: Imports of fishery products through April were somewhat larger than a year earlier. Most of the increase was in the major canned fishery products, which were up more than 25 percent. Although receipts of the important fresh and frozen fishery products during this period were only moderately higher

than in the same part of 1953, those of frozen groundfish and ocean perch fillets were up almost 20 percent. The increase was due mainly to stepped-up use of imported fillets by domestic producers of frozen "fish sticks." Exports of fishery products from January to April were smaller than a year earlier. Outgoing shipments of the major canned fish items were down about 18 percent. A considerable increase in canned salmon exports was more than offset by declines in sardines and mackerel. Trade prospects for the year as a whole are for somewhat heavier imports and smaller exports than in 1953.

This analysis appeared in a report prepared by the Bureau of Agricultural Economics, U. S. Department of Agriculture, in cooperation with the U. S. Fish and Wildlife Service, and published in the former agency's August 2, 1954, release of The National Food Situation (NFS-69).



Florida

SHRIMP EXPLORATIONS OFF WEST COAST BY "GOODWILL" (Cruise 1): Over the past several months decreasing shrimp production with a reduction in shrimp prices has caused an economic decline in the Florida shrimp industry. As a result of this serious economic situation a program was established by the Tampa Shrimp Producer's Association for the systematic exploration for shrimp off the western Florida coast.

Diesel Engine Sales of St. Augustine loaned the trawler Goodwill to the Association for a period of four months to carry out this exploratory work. The cost of operating the vessel is being shared by members of the Tampa Shrimp Producers' Association. At their request scientific personnel are being provided by the Marine Laboratory of the University of Miami, official research body of the State Board of Conservation, for the purpose of collecting data and making reports on the various cruises.

The first of these cruises by the Goodwill consisted of two trips to explore for shrimp in the area between Tampa and Cape San Blas off the west coast of Florida.

The Goodwill departed from St. Augustine for the first trip on June 17, 1954. After making a port call at Miami for provisions and gear it proceeded to Tampa and started its exploratory operations. A port call for repairs to the automatic pilot was made in Apalachicola on June 28-29. Explorations were resumed off Cape St. George. The Goodwill returned to Tampa on July 1 for reprovisioning.

The second trip of this cruise took place between July 4-10. On this trip the Goodwill operated in the area between Tampa and Anclote Light.

During the first trip, the Goodwill made 29 trawling stations in depths of 10 to 60 fathoms. The majority of the drags were made inside the 20-fathom curve. This area was unsuitable for trawling due to the presence of large quantities of loggerhead sponges and live and dead coral which littered the bottom.

No commercial concentrations of shrimp were discovered on this trip. One to six shrimp per 10- to 15-minute try-net drag were found in 11 to 14 fathoms at position 28°20' N. latitude and 83°30' W. longitude. These shrimp ranged from 15 to 30 count heads off. The small number of shrimp caught by the try net did not warrant the use of larger gear. The six try net stations in this position show the area to be trawlable and more extensive than any located east of Cape St. George.

A series of 6 stations off Cape San Blas in 21 to 60 fathoms did not yield any shrimp of commercial interest. In 25 fathoms at position 29°05' N. latitude and 85°25' W. longitude, a scallop bed covering some six miles in length was discovered. Three 15-minute drags with a 150-mesh try net yielded 60, 95, and 50 commercial scallops. These scallops are the desirable commercial species similar to Pecten gibbus and ranged from 1 $\frac{3}{4}$ to 3 inches in size. This scallop bed is large enough to be of commercial importance.

While the Goodwill was in Tampa on July 1-3, information was obtained concerning catches of commercial shrimp made in 10 to 14 fathoms northwest of Tampa. It was decided to investigate the extent and catch rate of this area.

Twenty-one try-net sets and eight sets with a 375-mesh flat trawl with extended wings were made on this trip. Three nights were spent in exploring before a suitable concentration of shrimp was discovered off Tarpon Springs at 28°07' N. latitude and 83°10' W. longitude.

The catch rate with the 375-mesh flat trawl was 275 pounds (heads on) pink shrimp (Penaeus duorarum) per hour. The total catch for two nights' fishing was 1,700 pounds of 41- to 45-count shrimp (heads off).

The area in which the Goodwill fished was not extensive, possibly $\frac{1}{2}$ mile in length and $\frac{1}{4}$ mile in width. Radio contacts with other boats indicate that many such sections of trawlable bottom with commercial concentrations of shrimp had been located in the general vicinity.

On these cruises no extensive trawlable mud bottom, similar to the Dry Tortugas and Campeche Banks, was found. Rather, the shrimp appeared to be isolated in small compact pockets which have to be bouyed off to prevent destruction of gear.

From 10 to 20 shrimp trawlers are currently operating in the waters off Tampa. Many of these boats have sustained severe gear damage, even complete loss of nets.

The trawlers working adjacent to the Goodwill had rigged their gear with a tickler chain attached to the bottom trailing edge of the trawl door. The length of the tickler chain varied, being either equal in length to the cork line or two feet shorter than the cork line. Other boats were fishing without the drop link chain. However, the Goodwill made good catches by leaving the drop link chain attached to the net.

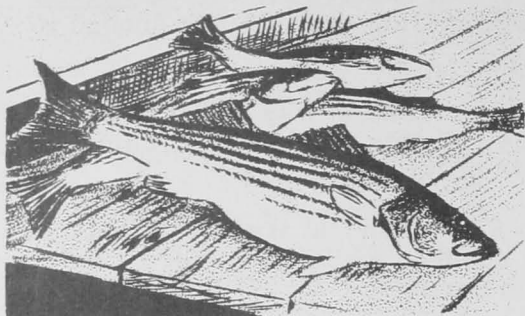
An electronic fishing aide, the "Shrimplupe," was installed on the Goodwill. The apparatus operates as a depth recorder as well as an indicator of the presence of marine organisms. An additional feature of this instrument is its ability to select any two fathoms of water for detailed study. No positive identification of shrimp were made on the first trip. This may have been due to the inexperience of the operator in identifying the objects on the screen of the "Shrimplupe" or to the lack of sufficient concentrations of shrimp.



Maryland

CHESAPEAKE BAY FISHERIES, 1946-50: The general condition of Maryland's Chesapeake Bay fisheries from 1946-50 appeared to be excellent, according to the Maryland Department of Research and Education at Solomons, Maryland. This conclusion is based on the results of a study of detailed records of the commercial fish catch of the State published in a bulletin, Maryland Commercial Fisheries Statistics, 1946-1950, issued recently from the Chesapeake Biological Laboratory.

The statistics set forth in the report were derived from records obtained only from licensed commercial fishermen; the bulletin contains no data pertaining to small unlicensed units of fishing gear, or to the sports fishery. While it is recognized that these figures do not represent the total finfish removal from Maryland



Striped Bass

waters, they do have very definite merit and usefulness. The stability of the commercial fishery makes it an excellent source of catch statistics suitable for critical comparison and analysis. The numbers of men, boats, and units of gear vary only slightly from year to year.

Prices for fish were relatively stable, averaging generally about 9 cents per pound for all species during the 5-year period. Total landings in 1950, for example, increased over 42 percent, and most of the major fish species followed an upward trend. Striped bass or rockfish catches increased 94 percent over the 1946 level, shad gained 101 percent, alewives 69 percent, and white perch landings rose 74 percent. All of these important commercial species reproduce in Maryland waters.

Croakers (hardheads) suffered a slight recession, but production in 1950 rose again to a point 3 percent above the 1946 figure. The only major species that failed to show stable or increased production is gray sea trout, which went steadily downward, resulting in a reduction of 84 percent.

In contrast to these Chesapeake Bay landings, the Atlantic Ocean catches indicate rather discouraging trends. The decline in total production was attributed in some measure to marketing difficulties, but to a greater extent resulted from phenomenal decreases in certain individual species. The following species of fish showed spectacular drops in production: king whiting, gray sea trout, croaker, and red (squirrel) hake. The declines in croakers and gray sea trout were reflected in both the trawl and pound-net catches, but king whiting and hake are more typically taken by trawls. The lower yields of these last two species resulted in a greater total reduction in the trawl fishery than in pound nets.

Altogether, 95 percent coverage of licensed commercial fishing was obtained during the five years included in the survey, entirely on a voluntary basis. The returns indicated seasonal patterns of fishing that were strikingly constant for each of the various types of gear.

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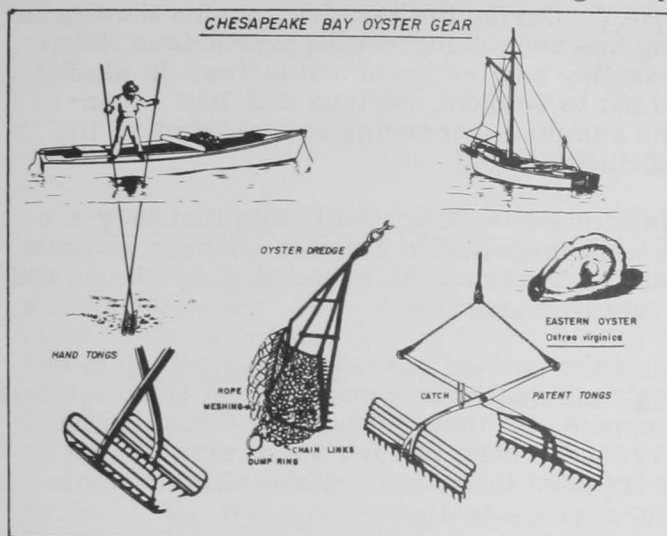
FOOD FISHERIES PRODUCTION DROPS IN 1953: The general condition of Maryland's Chesapeake Bay fishery in 1953 was not encouraging, according to Maryland Landings 1953, CFS No. 1029. This is a special bulletin containing preliminary data published recently by the Service's Branch of Commercial Fisheries in cooperation with the Maryland Department of Research and Education and the Maryland Department of Tidewater Fisheries. Although the total landings were well above the 1952 level and slightly above the 1944-52 average, this was due primarily to a noticeable increase in the catch of menhaden. A drop in the production of the major species of food fish occurred from 1952 to 1953. Sea trout, striped bass, and alewives increased slightly over the 1952 catch, but croaker, shad, and white perch failed to reach the 1952 level. Striped bass, shad, and alewives were above the average catch for 1944-52, while landings of croaker, white perch, and sea trout were below the average for the nine-year period.

The State's Atlantic Ocean fishery continued to decline during 1953. Pound-net catches totaled less than 6,000 pounds for the entire year. Total landings for all

other types of gear were only slightly above $3\frac{1}{2}$ million pounds, of which more than $1\frac{1}{2}$ million pounds were shucked meats of surf clams.

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OYSTER-SHELL PLANTING IN 1953/54 ONE OF LARGEST IN HISTORY: One of the largest oyster shell-planting operations in the history of the Maryland Tide-water Fisheries Department was being completed by that agency in the Maryland



portion of Chesapeake Bay, according to the July 1954 Maryland Tide-water News. On the average, about 150,000 bushels of oyster shells per week have been planted during the recent spring period. Plantings from Baltimore have been made since the oyster-shucking period began in the fall of 1953 through the early summer of 1954.

The shell-planting measure is designed to make old shells available as anchorage for baby oysters. A shell scow carries from 2,500 to 4,000 bushels, and the shells are trucked to the scows from packing plants which supply them to the State.

Under a new law, packers must surrender 50 percent of their shells without cost. The Department has planted about 1,750,000 bushels during the season and has a goal of 2,000,000 bushels per year.

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SPOT FISHERY INCREASES: The commercial fishery for spot (*Leiostomus xanthurus*), a small full-bodied member of the drumfish family, relative and fellow traveler with the croaker or hardhead in Maryland waters, has enjoyed a slight prosperity in increased harvest during the past decade, according to biologists of the Maryland Department of Research and Education at Solomons.

In addition to being a staple sports fish throughout Chesapeake Bay and a delicately-flavored species for human consumption, the spot is caught in relatively large numbers; but the fishery is much smaller than that for alewives, carp, croakers, eels, sea trout (weakfish), shad, and striped bass. Although large numbers are caught in late spring (when they come from the ocean), summer, and autumn, the financial returns to fishermen are not large.

The spot fishery started off two decades after the Civil War at a high level, but by the turn of the century it declined to a very low level. After World War I the landings and value increased to their present level. This change is demonstrated by the average annual landings for the following periods and the price per pound: (1) 1887-1891, 295,000 pounds at 4 cents per pound; (2) 1897-1908, 10,000 pounds at 2 cents per pound; (3) 1920-1938, 110,000 pounds at 3 cents per pound; and (4) 1939-1951, 151,959 pounds at 7 cents per pound. The conditions are about the same for the spot fishery in Virginia waters where it is eight times the size of the Maryland industry.

The changes in the types of gear used for catching spot are of interest. Between 1887 and 1891 most spot were caught on hand lines and sold commercially; secondary catches were made in haul seines, pound nets, gill nets, fyke nets, and weirs.

From 1929 to 1931 a few were caught in purse seines, but the largest percentage was taken in pound nets from 1929 to 1950, followed by haul seines. A small amount are taken in otter trawls in the ocean off Maryland. Although spot is not a Bay fish, it is quite important to the commercial and sports fisheries so that its future in the over-all fishery economy of Chesapeake Bay will be studied with great interest.

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HAKE CAUGHT IN CHESAPEAKE BAY: During the last few months the Chesapeake Biological Laboratory at Solomons has been deluged with mysterious fishes caught by sports fishermen in Chesapeake Bay and the lower estuaries. In almost every case these queer fish have turned out to be hake, curious cod-like ocean-dwellers that are visiting the Bay for the summer, according to biologists of the Maryland Department of Research and Education.

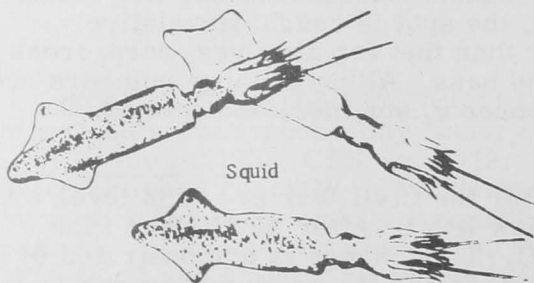
All fish examined have been less than 10 inches long, indicating that they are members of a dominant year-class that have migrated to the rich nursery grounds of the Bay. They probably arrived in late spring from the ocean as fingerlings, and have since grown large enough to be caught by fishermen.

The most commonly recorded form is the spotted hake, *Urophycis regius*, but one red (squirrel) hake, *Urophycis chuss*, was caught in a pound net at Hunting Creek, a tributary of the Patuxent River. Fishermen call them "ling" and "cod." The Chesapeake Biological Laboratory has recorded hake of such small size almost every year, but this year they are more frequent than usual. Hake of marketable size are too scarce in Chesapeake Bay to excite attention.

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SQUID PRODUCTION OFF OCEAN CITY DECREASES SLIGHTLY: The commercial fishery for squid, a close relative of the octopus, has decreased slightly off Ocean City, Maryland, according to the Maryland Department of Research and Education's bulletin *Maryland Tidewater News*. The incidental fishery for squid, principally *Loligo Peali*, is over a half century old. Squid, also known as "sea arrows," "cuttlefish," and "calamaries," do not occur in the Maryland portion of Chesapeake Bay.

The catch and value of squid have fluctuated over the years from 1904 to the present. The average annual yield in pounds and price per pound for the following periods indicate clearly this change: (1) 1904-1925, 14,842 pounds at 5 cents per pound; (2) 1929-1939, 59,400 pounds at 2 cents per pound; and (3) 1949-1951, 51,109 pounds at 3 cents per pound. By contrast the much larger fishery for squid off Virginia shows the following statistics: (1) 1929-1939, 206,674 pounds at 2 cents per pound; and (2) 1940-1951, 117,218 pounds at 4 cents per pound.



The demand for squid seems to be growing due to the fluctuating availability of this mollusk to pound-net and otter-trawl fishermen. Most squid are used as bait by commercial and sports fishermen, although many of the best restaurants in metropolitan areas serve it on their menu.

The Maryland squid fishery may be the source some day of live animals for use in medical research. The squid is important in nerve physiology and, hence, of potential value in medical research, because of the presence of a single giant nerve fiber rather than a complete bundle of nerve fibers. Squid are delivered alive daily from the ocean to scientists in an especially designed truck to points as far as

Cambridge, Massachusetts. The giant nerve fibers are easily dissected and handled, and the study of their properties, heretofore quite difficult with other experimental animals, has yielded a great deal of basic information that will benefit mankind.

Squid are caught in pound nets set in the ocean and in otter trawls operating near Ocean City during the summer months. During the earlier days of the fishery most squid were taken in pound and trap nets exclusively, but since the advent of the otter-trawl fishery off the Maryland coast, almost all squid are taken by that type of gear.



New England Tuna Explorations

WEST COAST PURSE SEINER FISHING TUNA OFF NEW ENGLAND: Bluefin tuna fishing on a commercial scale in waters off New England is being tried this summer. Based on results of tuna explorations conducted by the Service over the past three years in that area, experimental fishing by a California purse seiner commenced about the end of July in the Gulf of Maine and nearby waters. Considerable industry interest has been shown in this undertaking, as it will be the first commercial seining for North Atlantic tuna since an attempt was made by industry to establish such a fishery in 1938-40.

Captain Nick Mezin sailed late in June from San Pedro, California, with his purse seiner Western Pride and an experienced West Coast crew. The Western Pride was scheduled to arrive in the Cape Cod area on July 28. Mechanical difficulties caused a later start than was planned, but the vessel will purse seine for bluefin tuna in New England waters until the end of September or until it is apparent that the run of tuna is over for the season.

The Service's bluefin tuna exploratory program, which began in 1951, successfully showed that North Atlantic tuna could be taken by the purse-seine method in commercial quantities within a 100-mile radius of New England fishing ports. The catch that year was 180,000 pounds of prime tuna of a size ideal for canning. In 1952 and 1953 explorations the Service used long-line gear. Although catches were smaller with this type of gear than with the purse seine, the project in both years continued to demonstrate that good canning-size bluefin tuna could be caught over a wide area in the Gulf of Maine and adjacent waters during the summer months. Considerable information on the habits and movements of the tuna was obtained. However, additional exploration of offshore waters, in and beyond the Gulf Stream, is necessary before any extensive evaluation of the potential fishery can be made.

An experienced observer from the staff of the U. S. Fish and Wildlife Service has been assigned to accompany the Western Pride on all fishing trips in New England waters this year. Complete records of the scouting and seining activities will be maintained and made available to interested parties.



Pribilof Islands Fur-Seal Take, 1954

A total of 63,882 fur-seal skins was taken in 1954 in the Government-administered sealing operations on Alaska's Pribilof Islands. The annual sealing operations conducted by the Fish and Wildlife Service began June 22 on St. Paul Island and June 27 on St. George Island. Operations were terminated on July 27.

This year's yield was 2,496 skins under the 1953 take of 66,378. The average annual yield over the past 10 years has been around 65,000 skins.

Although the fur-seal industry on the Pribilofs is the responsibility of the United States Government, 20 percent of this year's take will be delivered to the Canadian Government under the terms of the Provisional Fur-Seal Agreement of 1942. The remaining skins will be delivered to a private concern in St. Louis for processing and sale at public auction under a Government contract.

Approximately 80 percent of the world's fur seals go to the Pribilof Islands each summer to breed. During the winter these seals range southward as far as southern California.

At one time the Alaskan seal's numbers diminished to such an extent that the herd's existence was threatened. The depletion was due principally to pelagic sealing--the indiscriminate killing of seals at sea.

Under the protection of international agreements, the herd has been restored and is being maintained at its original level of abundance. Since the annual take is limited primarily to three-year old males considered surplus from the standpoint of breeding, the species is assured of survival under present conditions.



U. S. Canned Packs of Selected Fishery Products, 1953

ALEWIVES: The 1953 United States pack of canned alewives amounted to 111,391 standard cases, valued at \$507,925 to the canners (table 1). This is an increase of 39 percent in quantity and 36 percent in value as compared with the previous year.

Table 1 - U. S. Pack of Canned Alewives by States, 1953 ^{1/}

State	Quantity	Value to Canners	Canners' Avg. Price Per Std. Case
	Std. Cases ^{1/}	\$	\$
Maryland and North Carolina ...	39,463	184,807	4.68
Virginia	71,928	323,118	4.49
Total	111,391	507,925	4.56

^{1/} Preliminary.

^{2/} Cases of various sizes converted to the equivalent of 48 cans per case, each can with a net weight of 15 ounces. Practically the entire pack was canned in 15-ounce cans.

Alewives were canned in 1953 by 5 plants in Maryland, 11 in Virginia, and 1 in North Carolina.

Table 2 - U. S. Pack of Canned Alewives, 1948-1953

Year	Quantity	Net Weight	Value to Canners	Canners' Avg. Price Per Std. Case ^{2/}
	Std. Cases ^{2/}	Lbs.	\$	\$
1953 ^{1/}	111,391	5,012,595	507,925	4.56
1952	79,861	3,593,745	374,680	4.69
1951	127,760	5,749,200	604,314	4.73
1950	69,568	3,130,560	316,993	4.56
1949	111,994	5,039,730	469,398	4.19
1948	123,134	5,541,030	639,356	5.19

^{1/} Preliminary.

^{2/} Cases of various sizes converted to the equivalent of 48 cans per case, each can with a net weight of 15 ounces.

Alewife runs were reported to be heavy during 1953 and more could have been canned if market conditions had justified a larger pack.

Canners received an average of \$4.56 per standard case for the 1953 pack, 3 percent less than the \$4.69 received in 1952. From 1948 through 1953, only in 1949 (\$4.19) did lower prices prevail (table 2).

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ANCHOVIES: The United States pack of canned anchovies in 1953 totaled 1,061,995 standard cases, valued at \$7,661,173, or an average price of \$7.21 per

Style of Pack	Quantity	Value to Cannerns	Canners' Avg. Price Per Std. Case
	Std. Cases ^{2/}	\$	\$
Natural, without sauce or oil	3,571	22,988	6.43
In tomato sauce	1,058,424	7,638,185	7.22
Total	1,061,995	7,661,173	7.21

^{1/}Preliminary.
^{2/}Cases of various sizes converted to the uniform basis of 100 cans, each can containing 5 ounces net.

Can and Case Sizes	Quantity	Value to Cannerns	Canners' Avg. Price Per Case
	Actual Cs.	\$	\$
5 ounces net (100 cans)	479,513	3,359,754	7.01
7 $\frac{1}{2}$ ounces net (48 cans)	427,648	2,775,051	6.49
15 ounces net (48 cans)	190,678	1,526,368	8.00
Total	1,097,839	7,661,173	-

^{1/} Preliminary.

standard case to the cannerns (table 1). California was the only state where anchovies were canned; 33 plants packed this product in 1953. Anchovies in tomato sauce comprised the bulk of the pack; the remainder was put up natural style.

The 1953 pack of anchovies, which was the largest ever reported, increased 57 percent in quantity and 62 percent in value as compared with the 1952 pack (table 2).

From a high of \$7.76 per standard case in 1951, the average price to the cannern dropped to \$7.21 per standard case in 1953 (table 3).

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CALIFORNIA SARDINES (PILCHARD): The 1953 pack of California sardines (pilchard) of 63,612 standard cases was valued at \$653,131 to the cannerns (table 1).

Style of Pack	Quantity	Value to Cannerns	Avg. Price Per Std. Case ^{3/}
	Std. Cases ^{3/}	\$	\$
Natural, without sauce or oil	18,523	151,029	8.15
In tomato sauce	36,146	405,050	11.21
In mustard sauce	8,943	97,052	10.85
Total	63,612	653,131	10.27

^{1/}Preliminary.
^{2/}Includes a small specialty pack of sardines (pilchards) in soy sauce.
^{3/}Cases of various sizes converted to the uniform basis of 48 cans to the case. Each can containing 15 ounces net.

This was the smallest pack since the inception of the fishery. As recently as 1950 the pack of these fish amounted to over 5 million cases. Sardines were canned in 18 plants in California during 1953.

Cannerns received an average price of \$10.27 per standard case in 1953 (table 3), an increase of \$1.67 over the 1952 price. The 1953 average price was the highest on record--slightly above

Year	Quantity	Value to Cannerns	Canners' Avg. Price Per Std. Case
	Std. Cases ^{2/}	\$	\$
1953 ^{1/}	1,061,995	7,661,173	7.21
1952	674,286	4,737,391	7.03
1951	63,060	489,062	7.76
1950	38,096	227,496	5.97
1949	5,771	34,184	5.92
1948	102,903	755,458	7.34
1947	199,863	1,377,275	6.89

^{1/}Preliminary.
^{2/}Cases of various sizes converted to the uniform basis of 100 cans, each can containing 5 ounces net.



that received by the canners in 1947 when the average price reached \$10.01 per case.

Table 3 indicates the trend in production in the period since 1948. As a result of the disappearance of the sardines from California waters, the pack declined to 2,864,984 cases in 1951, and to only 106,746 cases in 1952.

Table 2 - California Pack of Canned Sardines (Pilchard), by Size of Can and Case, 1953 1/

Can and Case Size	Quantity	Value to Canners	Canners' Avg. Price Per Case
	Actual Cs.	\$	\$
1 pound cans; 15 ounces net, oval (48 cans)	42,822	479,252	11.19
15 ounces net, tall (48 cans)	18,897	154,021	8.15
Other sizes converted to 15 ounces net (100 cans)	1,893	19,858	10.49
Total	63,612	653,131	-

1/ Preliminary.

Table 3 - California Pack of Sardines (Pilchards), 1948-53

Year	Quantity	Value to Canners	Canners' Avg. Price Per Std. Case
	Std. Case 1/	\$	\$
1953 2/	63,612	653,131	10.27
1952	106,746	918,072	8.60
1951	2,864,984	19,362,744	6.76
1950	5,070,805	26,345,609	5.20
1949	3,768,212	21,334,825	5.66
1948	2,654,149	21,892,893	8.24

1/ Cases of various sizes converted to the uniform basis of 48 cans to the case. Each can containing 15 ounces net.
2/ Preliminary.

CLAMS AND CLAM PRODUCTS: The 1953 United States and Alaska pack of canned clams and clam products amounted to 1,645,335 cases, valued at \$12,629,803

Table 1 - U. S. and Alaska Pack of Canned Clams and Clam Products by Type and Area, 1953 1/

Species and State	No. of Plants	Whole and Minced			Chowder, Juice, Broth, Bouillon, & Nectar			Total		
		Quantity	Value to Canners	Canners' Avg. Price Per Std. Case 2/	Quantity	Value to Canners	Canners' Avg. Price Per Std. Case 2/	Quantity	Value to Canners	Canners' Avg. Price Per Std. Case 2/
		Std. Cases 2/	\$	\$	Std. Cases 2/	\$	\$	Std. Cases 2/	\$	\$
Soft clams: Maine	5	20,002	345,595	17.28	287,825	1,804,888	6.27	307,827	2,150,483	6.99
Razor clams: Washington	4	6,759	135,497	20.05	-	-	-	6,759	135,497	20.05
Oregon	2									
Alaska	8									
Total Razor Clams	14	38,150	742,556	19.46	-	-	-	38,150	742,556	19.46
Hard clams: Rhode Island	1	228,711	2,494,795	10.91	1,037,447	6,910,198	6.66	1,226,158	9,404,993	7.67
New York	4									
New Jersey	2									
Pennsylvania	2									
Delaware	1									
Maryland	1									
Washington	4									
California	1	27,008	307,507	11.39	6,061	21,968	3.62	33,069	329,475	9.96
Alaska	1	131	2,296	17.53	-	-	-	131	2,296	17.53
Total Hard Clams 4/	11	255,850	2,804,598	10.96	1,043,508	6,932,166	6.64	1,299,358	9,736,764	7.49
Grand Total	35	314,002	3,892,749	12.40	1,331,333	8,737,054	6.56	1,645,335	12,629,803	7.68

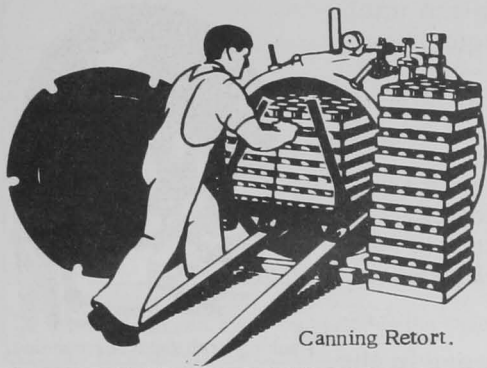
1/ Preliminary.

2/ Cases of various sizes converted to the equivalent of 48 No. 1 picnic cans, each can of whole or minced clams containing 5 ounces of meat, drained weight; and each can of chowder, juice, broth, bouillon, or nectar, 10 ounces net.

3/ Includes the pack of surf clams in Maine.

4/ Includes the pack of surf clams in New York, New Jersey, and Delaware; pismo clams in California; cockles in Alaska.

(table 1). This was a decrease of 53,656 cases, but an increase of \$420,245 as compared with the previous year's production. The pack of canned clam chowder, juice, broth, bouillon, and nectar comprised 31 percent of the total pack; canned whole and minced clams accounted for the remaining 19 percent, compared with 78 and 22 percent, respectively, in 1952.



The 1953 production of canned clams and clam products is the second highest on record, being exceeded only by 1952 (table 2); while the total value received by the canners in 1953 was the highest ever.

Table 2 - U. S. and Alaska Pack of Canned Clams and Clam Products, 1943-53

Year	Whole and Minced			Chowder, Juice, Broth,	Total	
	Soft Clams ^{3/}	Hard Clams ^{4/}	Razor Clams	Bouillon, & Nectar	Quantity	Value to Canners
	Std. Cases ^{2/}	Std. Cases ^{2/}	Std. Cases ^{2/}	Std. Cases ^{2/}	Std. Cases ^{2/}	\$
1953 ^{1/}	20,002	255,850	38,150	1,331,333	1,645,335	12,629,803
1952	27,020	318,358	35,803	1,317,810	1,698,991	12,209,558
1951	58,550	277,100	55,097	1,110,861	1,501,608	11,773,909
1950	200,889	198,451	47,154	1,072,225	1,518,719	10,839,889
1949	155,129	101,191	41,657	888,083	1,186,060	8,779,018
1948	107,177	29,085	36,932	1,006,580	1,179,774	8,329,639
1947	33,968	24,852	47,406	1,151,424	1,257,650	8,642,235
1946	167,987	108,638	79,394	1,171,770	1,527,789	11,145,047
1945	64,425	238,475	63,703	533,429	900,032	7,391,098
1944	72,434	71,771	40,450	363,041	547,696	3,820,612
1943	47,746	28,344	40,340	348,364	464,794	2,802,420

Note: For explanation of footnotes see table 1.

* * * * *

CRAB MEAT: The United States and Alaska pack of canned crab meat in 1953 amounted to 114,886 standard cases, valued at \$2,898,016 to the canners (table 1). East Coast and Gulf States packers canned 61 percent of the production; while the

Table 1 - U. S. and Alaska Pack of Canned Crab Meat by States and Species, 1953 ^{1/}

State	Species	Quantity	Value to Canners	Canners' Avg. Price Per Std. Case ^{2/}
		Std. Cases ^{2/}	\$	\$
Atlantic and Gulf States: Maine, North and South Carolina, and Alabama Mississippi, and Louisiana	Rock & Blue Blue	54,714	1,324,399	24.21
		15,620	270,011	17.29
		Total Atlantic and Gulf States	70,334	1,594,410
West Coast States: Washington Oregon and California Alaska	Dungeness Dungeness Dungeness King	15,842	410,109	25.89
		8,044	207,867	25.84
		14,547	470,785	32.64
		6,479	210,845	32.54
Total West Coast States		44,552	1,303,606	29.26
Grand Total		114,886	2,898,016	25.22

^{1/} Preliminary.

^{2/} Cases of various sizes converted to the equivalent of 48 cans to the case, each can containing 6-1/2 ounces net.

remainder was put up in West Coast and Alaskan plants. A total of 39 plants packed crab meat in 1953: 2 plants each in Alabama and Mississippi; 3 plants in Louisiana; 4 in Oregon; 9 in Washington; 15 in Alaska; and 1 plant each in Maine, North Carolina, South Carolina, and Oregon.

The 6½-ounce can continued as the most popular size can used for packing crab meat in 1953 (table 2).

Compared with previous years, the 1953 pack was the second lowest since 1945--the 1952 pack was the lowest. Production in 1953 was up 33 percent in quantity and 39 percent in value as compared with 1952, due mainly to increased production on the East Coast.



Packing crab meat for canning.

The canners' average price for canned crab meat in the Atlantic Coast and Gulf States was \$22.67 per standard case in 1953, 10 percent

Table 2 - U. S. and Alaska Pack of Canned Crab Meat by Can and Case Size, 1953 1/

Can and Case Size	Quantity	Value to Canners	Canners' Avg. Price Per Case
	<u>Actual Cases</u>	\$	\$
5 ounces net (24 cans)	33,935	442,577	13.04
6-1/2 ounces net (24 cans)	48,591	467,988	9.63
6-1/2 ounces net (48 cans)	35,203	897,959	25.51
13 ounces net (24 cans)	2,323	63,409	27.30
Other sizes converted to standard cases (6-1/2 oz.--48 cans)	40,112	1,026,083	25.64
Total	160,064	2,898,016	-

1/ Preliminary.

higher than in 1952; while in the Pacific Coast States and Alaska the average price again reached a new high of \$29.20, 4 percent above the previous year.

Table 3 - U. S. and Alaska Pack of Canned Crab Meat, 1943-53

Year	Atlantic Coast and Gulf States			Pacific Coast States and Alaska			Total		
	Quantity	Value to Canners	Canners' Avg. Price Per Std. Case 1/	Quantity	Value to Canners	Canners' Avg. Price Per Std. Case 1/	Quantity	Value to Canners	Canners' Avg. Price Per Std. Case 1/
	<u>Std. Cases 1/</u>	\$	\$	<u>Std. Cases 1/</u>	\$	\$	<u>Std. Cases 1/</u>	\$	\$
1953 2/	70,334	1,595,410	22.67	44,552	1,303,606	29.26	114,886	2,898,016	25.22
1952	44,474	913,808	20.55	41,584	1,173,211	28.21	86,058	2,087,019	24.25
1951	60,592	1,280,342	21.13	89,353	2,306,216	25.81	149,945	3,586,558	23.92
1950	58,958	1,252,589	21.25	78,532	1,868,680	23.80	137,490	3,121,269	22.70
1949	46,975	943,120	20.08	114,854	2,547,765	22.18	161,829	3,490,885	21.57
1948	33,382	581,872	17.43	187,420	4,264,622	22.75	220,802	4,846,494	21.95
1947	33,696	667,487	19.81	106,120	2,037,904	19.20	139,816	2,705,391	19.35
1946	120,150	2,536,405	21.11	78,928	2,183,714	27.67	199,078	4,720,119	23.71
1945	29,788	484,869	16.28	25,726	398,898	15.51	55,514	883,767	15.92
1944	36,386	560,735	15.41	50,556	800,723	15.84	86,942	1,361,458	15.66
1943	26,716	412,310	15.43	48,592	782,173	16.10	75,308	1,194,483	15.86

1/ Cases of various sizes converted to the equivalent of 48 cans to the case, each can containing 6-1/2 ounces net.

2/ Preliminary.

* * * * *

OYSTERS: The United States pack of canned oysters in 1953 totaled 488,908 standard cases, valued at \$6,559,309 to the processors (table 1). This was a decrease of 8 percent in quantity and 7 percent in value as compared with the 1952 pack. The Atlantic and Gulf States processed 77 percent of the pack, and the States

Table 1 - U. S. Canned Oyster Pack, by States, 1953 ^{1/}

State	Quantity	Value to	Canners' Avg. Price
	Std. Cases ^{2/}	Canners	Per Std. Case ^{2/}
		\$	\$
South Carolina and Georgia . . .	53,911	683,441	12.68
Alabama	14,469	209,829	14.50
Mississippi	123,624	1,713,525	13.86
Louisiana	182,217	2,515,046	13.80
Washington	109,704	1,377,037	12.55
Oregon	4,983	60,431	12.13
Total	488,908	6,559,309	13.42

^{1/} Preliminary.

^{2/} Cases of various sizes converted to the equivalent of 48 cans to the case, each can with 4-2/3 ounces (drained weight) of oyster meats.

Table 2 - U. S. Canned Oyster Pack, by Can and Case Size, 1953 ^{1/}

Can and Case Size	Quantity	Value to	Canners' Avg. Price Per Case
	Actual Cases	Canners	
		\$	\$
4-2/3 ounces (24 cans)	415,437	2,857,268	6.88
4-2/3 ounces (48 cans)	171,147	2,405,932	14.06
6-1/2 ounces (24 cans)	136,492	1,115,086	8.17
6-1/2 ounces (48 cans)	2,127	36,819	17.31
Other sizes converted to standard cases	12,024	144,204	11.99
Total	737,227	6,559,309	-

^{1/} Preliminary.

Table 3 - U.S. Canned Oyster Pack, 1943-53

Year	Atlantic and Gulf States	Pacific Coast States	Total
	(Standard Cases ^{2/})		
1953 ^{1/}	374,221	114,687	488,908
1952	416,728	112,415	529,143
1951	334,194	132,140	466,334
1950	371,648	120,742	492,390
1949	338,929	113,989	452,918
1948	273,591	83,489	357,080
1947	318,550	91,937	410,487
1946	261,622	129,213	390,835
1945	220,847	5,117	225,964
1944	273,556	-	273,556
1943	344,931	937	345,868

^{1/} Preliminary.

^{2/} Cases of various sizes converted to the equivalent of 48 cans to the case, each can with 4-2/3 ounces (drained weight) of oyster meats.

of Washington and Oregon the remaining 23 percent. Oysters were canned in 16 plants in Mississippi, 12 in Louisiana, 5 in Washington, 4 in South Carolina, 3 plants each in Alabama and Oregon, and 1 in Georgia.

Eighty percent of the pack was put up in the 4-2/3 ounce size, 19 percent in the 6-1/2 ounce size, and the remaining 1 percent in other sizes (table 2).

A large drop in the 1953 pack on the Atlantic and Gulf coasts was offset slightly by a small increase on the Pacific Coast (table 3).

The packers received an average price of \$13.42 per standard case for

the 1953 pack, compared to \$13.28 in 1952, \$12.72 in 1951, and \$14.41 in 1950 and 1949.

* * * * *

SALMON CANNED IN PACIFIC COAST STATES: The 1953 pack of canned salmon in the Pacific Coast States of California, Oregon, and Washington amounted to 1,049,547 standard cases, valued at \$24,067,839 to the canners (table 1). The Puget Sound district of Washington canned 84 percent of the pack, the Columbia River districts of Oregon and Washington 15 percent, and the coastal districts of the 3 states the remaining 1 percent. Salmon were canned at 30 plants in Washington, 9 in Oregon, and 1 in California.

The 1953 pack was 18 percent greater in quantity and 10 percent higher in value as compared with 1952 (table 2). This was due to the fact that 1953 was a pink salm-

Table 1 - Pacific Coast States Canned Salmon Pack by Species and Area, 1953^{1/}

Species	Puget Sound			Columbia River			Coastal			Total	
	Quantity	Value to Cannery	Cannery's Avg. Price Per. Std. Case	Quantity	Value to Cannery	Cannery's Avg. Price Per. Std. Case	Quantity	Value to Cannery	Cannery's Avg. Price Per. Std. Case	Quantity	Value to Cannery
	Std. Cases ^{2/}	\$	\$	Std. Cases ^{2/}	\$	\$	Std. Cases ^{2/}	\$	\$	Std. Cases ^{2/}	\$
Chinook or king	3,985	85,394	21.43	97,320	3,267,303	33.57	987	16,995	17.22	102,292	3,369,692
Chum or keta	154,476	2,149,803	13.92	9,775	130,062	13.30	11,255	143,519	12.75	175,506	2,423,384
Pink	452,054	8,296,849	18.35	251	5,318	21.19	-	-	-	452,305	8,302,167
Red or sockeye	216,984	7,287,895	33.59	3,014	127,791	42.40	442	17,559	39.73	220,440	7,433,245
Silver or coho	54,943	1,237,717	22.53	24,219	676,237	27.92	442	8,776	20.80	79,584	1,922,730
Steelhead	-	-	-	19,420	616,621	31.75	-	-	-	19,420	616,621
Total	882,442	19,057,658	21.60	153,999	4,823,332	31.32	13,106	186,849	14.26	1,049,547	24,067,839

^{1/}Preliminary. Does not include Alaska salmon pack.
^{2/}"Standard cases" represent cases of various sizes converted to the equivalent of 48 1-pound cans, each can containing 16 ounces net.

on year (pink salmon have a two-year cycle and are taken in volume in Puget Sound only in odd-numbered years), and in spite of a decrease in all other varieties except steelhead. The largest decreases were for silver or coho (62 percent) and chum or keta (46 percent).

The average price of all salmon packed in the Pacific Coast States in 1953 was \$22.93 per standard case to the cannery as compared with \$24.61 in 1952. Columbia

Table 2 - Pacific Coast States Canned Salmon Pack, by Species, 1943-53

Year	Chinook or King	Chum or Keta	Pink	Red or Sockeye	Silver or Coho	Steelhead	Total
	Standard Cases ^{1/}						
1953 ^{2/}	102,292	175,506	452,305	220,440	79,584	19,420	1,049,547
1952	105,208	326,251	4,711	225,160	209,847	18,979	890,156
1951	157,231	262,037	441,605	163,657	121,882	14,862	1,161,274
1950	151,928	539,982	2,277	136,741	160,625	10,266	1,001,819
1949	157,861	219,652	553,987	107,801	85,143	8,881	1,133,325
1948	285,266	276,158	4,480	97,907	125,647	20,617	810,075
1947	300,029	185,178	628,300	37,095	155,842	22,782	1,329,226
1946	164,898	68,762	160	283,935	25,505	17,029	560,289
1945	139,262	1,214	301,376	53,130	43,580	19,207	557,769
1944	167,070	1,669	490	38,061	17,809	20,489	245,588
1943	134,225	9,387	62,025	21,610	32,383	16,259	275,889

^{1/} Cases of various sizes converted to the equivalent of 48 1-pound cans, each can containing 16 ounces net.
^{2/} Preliminary

River canned salmon had the highest average price--\$31.32 per standard case--due to the large percentage of chinook salmon in the pack from that area. The 1952 average on the Columbia River was \$33.55 per case. Salmon canned in the Puget Sound area averaged \$21.60 per standard case to the canner in 1953 and coast salmon averaged \$14.26, compared with \$22.68 and \$18.46, respectively, in 1952.



Canning tuna.

TUNA AND TUNALIKE FISH: The pack of canned tuna and tunalike fish in the United States, Hawaii, and Puerto Rico during 1953 set a new record of 9,580,026 standard cases, valued at \$126,257,608 to the cannery (table 1). This is the first year that tuna was canned in Puerto Rico.

Yellowfin tuna was the leading species canned with 3,058,985 cases, valued at \$40,097,135. The second most important species was albacore (white-meat tuna) with 2,690,635 cases, valued at \$37,460,824; followed by skipjack with 2,529,539 cases, valued at \$32,982,103 (table 2).

California, which packed 86 percent of the total, continued as the leading state canning tuna. The balance was

Table 1 - Canned Tuna and Tunalike Fish Pack by Species and Area, 1953 1/

Species	California			Washington, Oregon, and Hawaii			Atlantic Coast and Puerto Rico		
	Quantity	Value to Canners	Canners' Avg. Price Per Std. Case ^{2/}	Quantity	Value to Canners	Canners' Avg. Price Per Std. Case ^{2/}	Quantity	Value to Canners	Canners' Avg. Price Per Std. Case ^{2/}
	Std. Cases ^{2/}	\$	\$	Std. Cases ^{2/}	\$	\$	Std. Cases ^{2/}	\$	\$
Tuna:									
Albacore	2,100,115	29,025,314	13.82	590,520	8,435,510	14.28	-	-	-
Yellowfin	3,058,985	40,097,135	13.11	-	-	-	-	-	-
Bluefin	218,865	2,888,125	13.20	-	-	-	-	-	-
Skipjack	2,529,539	32,982,103	13.04	-	-	-	-	-	-
Tonno	186,068	2,639,125	14.18	-	-	-	-	-	-
Miscellaneous	12,135	127,543	10.51	3/ 464,143	3/5,844,981	12.59	4/246,689	4/2,704,359	10.96
Total Tuna	8,105,707	107,759,345	13.29	1,054,663	14,280,491	13.54	246,689	2,704,359	10.96
Tunalike fishes:									
Bonito	70,853	624,172	8.81	-	-	-	-	-	-
Yellowtail	102,114	889,241	8.71	-	-	-	-	-	-
Total Tuna-like Fishes	172,967	1,513,413	8.75	-	-	-	-	-	-
1953 Grand Total	8,278,674	109,272,758	13.20	1,054,663	14,280,491	13.54	246,689	2,704,359	10.96
1952 Grand Total	7,969,866	98,021,745	12.30	940,824	12,623,184	13.42	204,512	2,355,904	11.52
1951 Grand Total	7,454,315	88,830,304	11.92	645,232	8,653,963	13.41	137,178	1,561,939	11.39

1/ Preliminary. Includes dietetic and baby food packs.

2/ Cases of various sizes converted to the equivalent of 48 No. 1/2 tuna cans to the case, each can 7 ounces net weight for solid meat, 6-1/2 ounces net weight for chunks, or 6 ounces net weight for flakes or grated.

3/ Includes mostly yellowfin and skipjack; and some albacore, bluefin, and big-eyed tuna.

4/ Includes albacore, yellowfin, bluefin, skipjack, and little tuna.

Table 2 - Canned Tuna and Tunalike Fish Pack by Species, 1951-53

Species	1953 Total 1/			1952 Total			1951 Total		
	Quantity	Value to Canners	Canners' Avg. Price Per Std. Case ^{2/}	Quantity	Value to Canners	Canners' Avg. Price Per Std. Case ^{2/}	Quantity	Value to Canners	Canners' Avg. Price Per Std. Case ^{2/}
	Std. Cases ^{2/}	\$	\$	Std. Cases ^{2/}	\$	\$	Std. Cases ^{2/}	\$	\$
Tuna:									
Albacore	2,690,635	37,460,824	13.92	2,588,326	34,129,900	13.19	1,563,753	19,958,605	12.76
Yellowfin	3,058,985	40,097,135	13.11	4/4,016,878	4/48,540,195	12.08	4,070,995	48,365,425	11.88
Bluefin	218,865	2,888,125	13.20	94,898	1,179,701	12.43	5/ 71,922	797,817	11.09
Skipjack	2,529,539	32,982,103	13.04	1,641,278	20,379,405	12.42	2,126,800	25,238,212	11.87
Tonno	186,068	2,639,125	14.18	146,567	1,990,523	13.58	160,626	2,180,231	13.57
Misc.	3/ 722,967	8,676,883	12.00	3/ 400,255	4,842,975	12.10	3/ 137,178	1,561,939	11.39
Total Tuna	9,407,059	124,744,195	13.26	8,888,202	111,062,699	12.50	8,131,274	98,102,229	12.06
Tunalike Fish:									
Bonito	70,853	624,172	8.81	47,213	415,165	8.79	14,469	134,364	9.29
Yellowtail	102,114	889,241	8.71	179,787	1,522,969	8.47	90,982	809,613	8.90
Total Tuna-like Fish	172,967	1,513,413	8.75	227,000	1,938,134	8.54	105,451	943,977	8.95
Grand Total	9,580,026	126,257,608	13.18	9,115,202	113,000,833	12.40	8,236,725	99,046,206	12.02

1/ Preliminary. Includes dietetic and baby food packs.

2/ Cases of various sizes converted to the equivalent of 48 No. 1/2 tuna cans to the case, each can 7 ounces net weight for solid meat, 6-1/2 ounces net weight for chunks, or 6 ounces net weight for flakes or grated.

3/ Includes some albacore, yellowfin, bluefin, skipjack, little tuna, and big-eyed tuna.

4/ Includes small production of light meat and dark meat packed from mixed tuna species.

5/ Includes small production of skipjack tuna.

canned in Washington and Oregon, and a small pack in Massachusetts, Pennsylvania, Maryland, South Carolina, and Puerto Rico. Dietetic and baby food tuna packs are included in these totals.

Table 3 - Canned Tuna and Tunalike Fish Pack, 1942-53 1/

Year	Quantity	Value to Canners	Canners' Avg. Price Per Std. Case 2/	Year	Quantity	Value to Canners	Canners' Avg. Price Per Std. Case 2/
	Std. Cases 2/	\$	\$		Std. Cases 2/	\$	\$
1953 3/	9,580,026	126,257,608	13.18	1947	5,894,495	90,609,175	15.37
1952	9,115,202	113,000,833	12.40	1946	4,784,484	59,135,823	12.36
1951	8,236,725	99,046,206	12.02	1945	4,531,565	47,407,451	10.46
1950	9,016,541	112,830,094	12.51	1944	3,560,020	40,836,117	11.80
1949	7,290,320	97,710,325	13.40	1943	2,696,073	31,430,189	11.66
1948	7,037,758	112,612,296	16.00	1942	2,484,749	30,742,493	12.37

1/ Data for years prior to 1952 do not include pack in Hawaii.

2/ Cases of various sizes converted to the equivalent of 48 No. 1/2 tuna cans to the case, each can 7 ounces net weight for solid meat, 6-1/2 ounces net weight for chunks, or 6 ounces net weight for flakes or grated.

3/ Preliminary. Includes dietetic and baby food packs.

The average price per standard case in 1953 (\$13.18) was 6.3 percent higher than in 1952 (\$12.40), but 17.7 percent below the record high of \$16.00 per case in 1948 (table 3).



U. S. Fish Stick Production, January-June 1954



Pouring batter on fish sticks prior to breading in a leading Gloucester fishery products plant.

The United States production of cooked and uncooked fish sticks in June 1954 amounted to nearly 4½ million pounds-- the largest ever reported for any one month. The data in table 1 include the yield of 33 plants, many of which packed for more than one company, and the figures are believed to represent practically the entire United States pack of fish sticks.

Fish sticks were produced throughout 1953, but quantity production did not begin until July of that year. Revised data on the monthly production during 1953 are presented in table 2.

Table 1 - U. S. Production of Fish Sticks, January-June 1954

Month	Cooked	Uncooked	Total
	(Pounds)		
January.	2,491,000	335,000	2,826,000
February	2,920,600	321,300	3,241,900
March..	3,650,300	439,800	4,090,100
April ..	3,357,900	450,600	3,808,500
May ...	3,463,000	445,700	3,908,700
June ...	4,072,500	361,200	4,433,700
Total .	19,955,300	2,353,600	22,308,900

Table 2 - U.S. Production of Fish Sticks (Cooked and Uncooked) by Months, 1953

Month	Lbs.	Month	Lbs.
January	115,000	July	416,600
February	133,000	August	454,400
March	148,000	September	809,500
April	34,900	October	1,434,900
May	21,800	November	1,901,800
June	30,800	December	2,001,200
		Total	7,501,900

U. S. Foreign Trade

EDIBLE FISHERY PRODUCTS, MAY 1954: United States imports of fresh, frozen, and processed edible fish and shellfish during May 1954 totaled 69.4 million pounds (valued at \$18.2 million), according to the May United States Foreign Trade, a Department of Commerce publication (see table). This is a decrease of 10 percent in quantity and 8 percent in value as compared with April imports of 76.7 million pounds (valued at \$19.7 million). Compared with a year earlier, May imports were higher by 39 percent in quantity and 25 percent in value.

UNITED STATES FOREIGN TRADE IN EDIBLE FISHERY PRODUCTS, MAY 1954 AND COMPARISONS						
Item	May 1954		May 1953		Year 1953	
	Quantity	Value	Quantity	Value	Quantity	Value
	1,000 Lbs.	Million \$	1,000 Lbs.	Million \$	1,000 Lbs.	Million \$
IMPORTS:						
Fish & shellfish: Fresh, frozen, & processed ^{1/}	69,368	18.2	49,904	14.6	724,656	193.2
EXPORTS:						
Fish & shellfish: Processed ^{1/} only (excluding fresh and frozen)	3,081	0.7	6,645	1.5	58,920	14.4

^{1/} Includes pastes, sauces, clam chowder and juice, and other specialties.
 SOURCE: UNITED STATES FOREIGN TRADE (Trade by Commodity), Summary Report FT 930, May 1954, U. S. Department of Commerce.

Exports of processed edible fish and shellfish (excluding fresh and frozen) in May 1954 totaled over 3.0 million pounds (valued at \$0.7 million)--lower by 4.7 percent in quantity but unchanged in value as compared with April exports of 3.2 million pounds (valued at \$0.7 million). May exports were down 54 percent in quantity and 53 percent in value as compared with a year earlier.

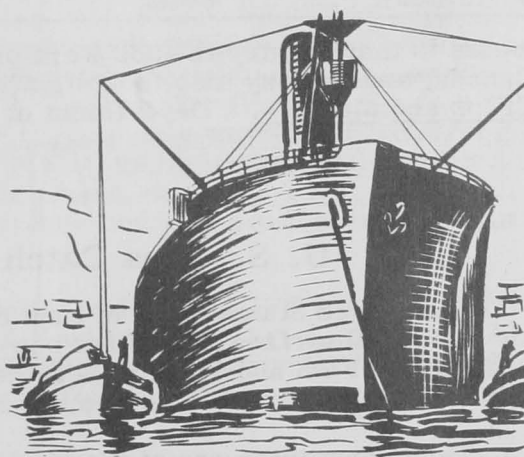
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JANUARY-MAY 1954 TRENDS: Imports: Substantial increases in most of the leading fishery products imports during the first five months of 1954 over the similar period of 1953 are shown by preliminary data compiled by the Fish and Wildlife Service from data collected by the Bureau of Census.

United States imports of groundfish (including ocean perch) fillets during January-May 1954 were 39 percent above those of the same period a year ago. This gain was accounted for principally by greater imports from Iceland.

Among the tuna and tunalike items, imports of fresh and frozen tuna showed an increase of 48 percent above the 5-months' period of 1953, tuna canned in brine was 64 percent greater, and bonito canned in oil increased by 44 percent.

Fish-meal imports showed additional gains during May with the result that the total imports for the first 5 months of 1954 were 28 percent larger than those during the same period a year earlier.



Imports of sardines canned in oil were 7 percent below those of January-May of a year ago, but imports of sardines canned not in oil were up 142 percent.

U. S. Fish-Oil Exports by Country of Destination, 1953 With Comparisons					
Country of Destination	1953 ^{1/}	1952 ^{1/}	1951	1950	Average 1935-39
. (Short Tons)					
NORTH AMERICA:					
British West Indies	-	-	113	-	12
Canada	2,108	488	1,734	1,696	458
Cuba	87	100	71	181	155
Mexico	114	122	63	128	45
Other	1	3	5	8	59
Total	2,310	713	1,986	2,013	729
SOUTH AMERICA					
	63	38	110	60	96
EUROPE:					
Bel.-Luxem.	764	8	282	20	8
France	7	149	1,162	47	19
Western Germany	36,155	^{2/} 6,232	6,050	5,645	126
Italy	28	220	14	7	15
Netherlands	8,913	11,967	6,024	20,705	15
Norway	1,606	-	4,514	-	10
Switzerland	3,115	3,140	4,027	8,891	15
Other	322	43	-	34	92
Total	50,910	^{2/}21,759	22,073	35,349	300
ASIA:					
Phil., Rep. of	860	546	744	540	66
Other	37	20	7	25	24
Total	897	566	751	565	90
OTHER					
	53	3	-	-	19
Grand total	54,233	^{2/}23,079	24,920	37,987	1,234

^{1/} Preliminary.

^{2/} Revised.

ments to that country in 1952 were only 6,232 tons. The Netherlands, Switzerland, Canada, and Norway also took significant quantities, states the March 22 Foreign Crops and Markets, a Department of Agriculture publication.

Shrimp imports were 16 percent greater during January-May 1954 than those of the similar period of 1953. Among items showing declines were canned crab meat imports which declined by 34 percent and tuna canned in oil which declined by 75 percent.

Exports: Exports of canned salmon during the first 5 months of 1954 were 160 percent above those of the same period of 1953, reflecting increased shipments to the United Kingdom made early in 1954.

Fish-oil exports were 89 percent greater than those during the 5-months' period of 1953. Fish-oil exports in 1953 reached record levels. Exports of canned sardines and mackerel were below those of the same period a year ago.

* * * * *

FISH-OIL EXPORTS AT RECORD HIGH IN 1953: United States exports of fish oil in 1953 totaled 54,233 short tons (see table), more than twice the quantity exported in the preceding year, and 43 percent above the previous record exportation in 1950. About 94 percent of the total was sold to Europe with the largest single volume--36,155 tons--going to Western Germany. The large export to Western Germany last year was responsible for the over-all increase, as ship-



U. S. Tuna Catch Can Be Greatly Increased

The United States catch of tuna could be greatly increased by adoption of methods for taking subsurface stocks not now exploited and by fishing new areas in the mid-Pacific, the Fish and Wildlife Service reports as the result of a comprehensive study made about a year ago.^{1/}

Tuna constitutes one of the world's leading fishery resources and the United States catch, which has averaged about 350 million pounds annually in recent years, is one of the most valuable products taken by fishermen.

Since the war, increased demand for canned tuna in the United States has stimulated world interest in the

^{1/}Special Scientific Report: Fisheries No. 104 (Survey of the Domestic Tuna Industry).



tuna fisheries. The tuna fleet consists of craft on which little improvement can be made to increase the present efficiency of production. Unless some revolutionary means of catching tuna is developed to a practical stage, there appears to be little chance of curtailing production costs through increased effectiveness per-unit-of-crew effort.

An important aspect of the tuna fishery is live bait, since 70 percent of the total catch of tuna by United States vessels is made with it. Between 85 and 90 percent of the bait supply is found in foreign countries. A limited amount of research concerning synthetic bait has been started. Development of a suitable synthetic bait or substitute source of natural bait would benefit the tuna industry.

At least 50 percent of the weight of the whole tuna, as landed, is not canned. The so-called "waste" material is used to produce liver oils, solubles, liquid fertilizer, oil, and meal.

The two leading canned fish products for human consumption, tuna and salmon, show divergent consumption trends--the demand for tuna is increasing while that for salmon has declined.



Wholesale Prices, July 1954

Although production continued liberal, an improvement in demand caused an over-all upward movement in July wholesale prices for fishery products. The July 1954 over-all edible fish and shellfish (fresh, frozen, and canned) wholesale index was 103.5 percent of the 1947-49 average (see table)--6.3 percent more than the June index and 1.0 percent above a year earlier.



Wrapping fillets.

Lighter groundfish landings in New England and a good demand boosted July ex-vessel prices for offshore drawn large haddock at Boston 99.0 percent above June and 36.3 percent above July 1953. But prices for scrod haddock (not included in the index) did not fare as well. At New York during July, slackening off of arrivals strengthened the prices for fresh Western halibut; but heavier seasonal receipts accounted for the lower salmon prices. The market for fresh-water fish at New York and Chicago in July was somewhat stronger than in June, but it was not up to the level reported a year earlier. The drawn, dressed, or whole finfish subgroup index for July was 21.3 percent above June and 17.7 percent higher than in July 1953.

In spite of the higher prices for offshore large haddock, July fresh haddock fillet prices remained steady at the June level. A drop in fresh shrimp prices at New York City was principally responsible for the decline of 2.0 percent in the fresh processed subgroup from June to July. The index for this subgroup was 14.8 percent lower than in July 1953.

A steady demand for frozen processed fish and shellfish during July stabilized prices for these products at June levels. Compared with July 1953, however, the subgroup index for frozen processed fishery products this July was 13.1 percent lower principally because of substantially lower prices (down 37.0 percent) for frozen shrimp and flounder fillets (down 7.3 percent) which were not completely offset by higher prices for frozen haddock (up 21.3 percent) and ocean perch (up 15.5 percent) fillets.

A break in canned tuna and Maine sardine prices accounted for the decline of 1.3 percent from June to July in the canned fishery products subgroup index. This

Table 1 - Wholesale Average Prices and Indexes for Edible Fish and Shellfish, July 1954 and Comparisons

Group, Subgroup, and Item Specification	Point of Pricing	Unit	Avg. Prices ^{1/}		Indexes (1947-49=100)			
			(\$)		July	June	May	July
			1954	1954	1954	1954	1954	1953
ALL FISH & SHELLFISH (Fresh, Frozen, & Canned)					103.5	97.4	103.7	102.5
Fresh & Frozen Fishery Products:					109.7	2/ 98.8	2/106.9	107.2
Drawn, Dressed, or Whole Finfish:					119.0	2/ 98.1	107.1	101.1
Haddock, lge., offshore, drawn, fresh	Boston	lb.	.12	.06	119.0	59.8	102.1	87.3
Halibut, West., 20/80 lbs., drsd., fresh or froz.	New York	lb.	.34	.33	106.0	100.6	97.5	102.9
Salmon, king, lge. & med., drsd., fresh or froz.	New York	lb.	.57	.63	128.4	140.5	120.8	110.7
Whitefish, L. Superior, drawn, fresh	Chicago	lb.	.43	.43	105.4	105.4	114.0	112.8
Whitefish, L. Erie pound or gill net, rnd., fresh	New York	lb.	.55	.45	111.2	91.0	123.3	91.0
Lake trout, domestic, No. 1, drawn, fresh	Chicago	lb.	.51	.49	104.5	99.4	79.9	107.6
Yellow pike, L. Michigan, rnd., fresh	New York	lb.	.61	.38	143.0	2/ 89.1	84.4	143.6
Processed, Fresh (Fish & Shellfish):					98.7	100.7	107.8	115.9
Fillets, haddock, sml., skins on, 20-lb. tins	Boston	lb.	.22	.22	74.8	74.8	107.2	93.6
Shrimp, lge. (26-30 count), headless, fresh	New York	lb.	.59	.60	93.3	94.8	99.6	124.9
Oysters, shucked, standards	Norfolk	gal.	4.50	4.63	111.3	114.4	117.5	111.3
Processed, Frozen (Fish & Shellfish):					97.6	97.6	104.5	112.3
Fillets: Flounder (yellowtail), skinless, 1-lb. pkg.	Boston	lb.	.39	.39	100.8	100.8	96.9	108.7
Haddock, sml., skins on, 1-lb. pkg.	Boston	lb.	.32	.32	100.4	100.4	105.1	82.8
Ocean perch, skins on, 1-lb. pkg.	Boston	lb.	.29	.29	116.8	116.8	117.8	101.1
Shrimp, lge. (26-30 count), 5-lb. pkg.	Chicago	lb.	.55	.55	84.1	84.1	99.5	133.4
Canned Fishery Products:					94.2	95.4	98.8	95.5
Salmon, pink, No. 1 tall (16 oz.), 48 cans/cs.	Seattle	case	18.70	18.70	99.1	99.1	99.1	100.4
Tuna, lt. meat, chunk, No. 1/2 tuna (6-1/2 oz.), 48 cans/cs.	Los Angeles	case	13.05	13.25	94.1	95.5	102.4	92.4
Sardines, Maine, keyless oil, No. 1/4 drawn (3-1/4 oz.), 100 cans/cs.	New York	case	6.50	6.95	69.2	74.0	81.9	71.3

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

^{2/}Revised.

index was 1.4 percent below July 1953. Although salmon prices were unchanged from June to July, they were 1.4 percent lower than a year earlier. Compared with July 1953, prices this July for canned tuna were up 1.8 percent and for canned Maine sardines were down 2.9 percent.



DO YOU KNOW:

That Billingsgate has been the fish market for the population of London for hundreds of years. It is impossible to say how many people were catered to when the market started as no census was taken then, but it is known that 300 years ago the figure was a quarter of a million. Today, with Greater London, it is about 10 to 12 million people.

Billingsgate handles from 400 to 600 metric tons of fishery products per day, but on occasions the amount is considerably larger.

--Fish Trades Gazette, July 24, 1954,