

Additions to the Fleet of Fishing Vessels
A total of 39 vessels of 5 net tons and over received their first documents is fishing craft during January 1953--4 more than in January 1952. Florida west :oast led with 10 vessels, followed by Louisiana with 7 vessels and Florida east Uoast with 5 vessels, according to a report from the Bureau of the Customs.



## Alaska Salmon Research Extended to Offshore Waters

Research on Alaska salmon in offshore areas of the North Pacific, including the Bering Sea, will be conducted in the summer of 1953 by the U. S. Fish and Wildlife Service, the Secretary of the Interior announced on March 27. This workwill involve the catching of salmon in waters north and south of the Aleutian Islands in an area centered at $175^{\circ} \mathrm{W}$. longitude, which runs through Atka Island。

Objectives of the program are (1) to gain as much knowledge as possible of the distribution, abundance, life history, racial composition, and other factors of the North Pacific salmon in offshore waters, and (2) to test and evaluate the effectiveness of various types of gear for catching salmon on the high seas. This will involve developing means of capturing salmon in considerable numbers suitable for future tagging experiments.

Fishing will begin not later than June 1, which will require departure of the vessel from Seattle about May 15. Activities will continue through July and possibly into August, depending on requirements of the program.

Detailed planning and duties of this project are the joint responsibility of three Branches of the Fish and WiIdlife Service:

Branch of Commercial Fisheries-general operation of the exploratory fishing vessel John $N$. Cobb; developing, supplying, and operating the gear for catching the salmon.

Branch of Fishery Biology--making biological observations and analyzing the data.

The Branch of Alaska Fisheries assisted in the planning of the project.
A cooperator from the Fisheries Research Institute of the University of Washington will also be aboard the vessel to work on the project.

The Director of the U. S. Fish and Wildlife Service explained that the project was a part of the preliminary salmon research begun in the summer of 1952 in connection with the International Convention for the High Seas Fisheries of the North Pacific Ocean, signed at Tokyo, May 9, 1952, subject to ratification by the United States, Canada, and Japan. The Convention establishes the meridian of $175^{\circ}$ W. longitude as a provisional line of demarcation between salmon of American and Asiatic origin. Both Japan and Canada have agreed to abstain from fishing for salmon east of this line in the Bering Sea. A protocol to the Convention provides for scientific investigation to determine the location of a permanent line of demarcation.

Although the Convention has not yet entered into force, the Fish and Wildlife Service has already initiated research in the area. During the summer of 1952, a Service biologist accompanied a Japanese salmon expedition operating in the Bering Sea west of $175^{\circ} \mathrm{W}$. longitude to collect data bearing upon the distribution of salmon.


## Atlantic States Marine Fisheries Commission

NORTH AND MIDDLE ATLANTIC SECTIONS MERET: Dragging regulations in inlandwater and the marginal sea were discussed at a joint meeting of the North and Middle Atlantic sections of the Atlantic States Marine Fisheries Commission held at New York on March 12. The U. S. Fish and Wildlife Service was requested to summarize all available data on the effects of dragging on bottom life and the sea bottom, and if data is inadequate, to outline a program of study and estimate costs.

New York, New Jersey, and Massachusetts fishermen reported concern over the decline in sea-scallop production and the sections, after full discussion, voted to ask the Fish and Wildlife Service to make a quick study and report on thismatter

[^0]New York, Connecticut, and New Jersey members discussed at length New York's new act repealing the 6 -inch size limit on butterfish adopted at the request of anglers and cormercial fishermen. Connecticut representatives declined to recommend similar legislation in that State and New Jersey officials indicated they would not take any action this year but would study the results of New York's action.

Also discussed were the new Weichel Act adopted by Congress in 1952, forbidding the shipment of fish into or out of any state in violation of its laws; the regulation of out-of-state boats in inland marine waters; Tidelands bills pending in Congress; offshore waste disposal by industry; and several minor bills in the several states.


## California

TUNA FLEET ALERTED TO WATCH FOR TAGGED FISH: California's tuna-fishing fleet has been alerted to be on the lookout during 1953 for fish tagged by the State Department of Fish and Game, reports a March 18 release by that Agency. Marine biologists have been tagging skipjack, albacore, and other tuna for 12 months under the Department's tuna research program, and are keenly interested in examiningall tagged fish caught, the State agency reports. Recoveries of tagged tuna will help the Department determine basic migration patterns, rate of growth, and population groups. The over-all aim is to gain knowledge so that the fishery's abundance and sustained yield can be assured. Several tagged tuna already have been recovered.

Fishermen are asked to preserve in the round all tagged fish recovered, and turn them over to the nearest California Fish and Game office. The State's current marine tag is a short piece of plastic "spaghetti" threaded through the fish behind the second dorsal fin. It contains the original tagging data and should be returned with the fish.


## Federal Purchases of Fishery Products

FRESH AND FROZEN FISHERY PRODUCTS PURCHASED BY DEFENSE DEPARTMENT, FEBRUARY 1953: The Army Quartermaster Corps in February $1 \overline{953}$ purchased a total of 1,483,034 pounds (valued at $\$ 866,229$ ) of fresh and frozen fishery products for the military feeding of the U.S.Army, Navy, Marine Corps, and Air Force (see table). This was 4.8 percent less in quantity but 3.1 percent more in value as compared with the previous month; and less than in February 1952 by 31.8 percent in quantity and 16.8 percent in value.

Purchases of fresh and frozen fish by the Army Quartermaster Corps for the first two months in 1953 amounted to $3,041,206$ pounds (valued at $\$ 1,706,245$ ), a

decrease of 32.3 percent in quantity and 19.7 percent in value as compared with the same period in 1952.

Prices paid for fresh and frozen $f$ ish by the Army Quartermaster Corps in February averaged 58.4 cents per pound as compared with 53.9 cents in January, and 47.9 cents in February 1952.

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 for April-June 1953

Civilian per-capita consumption of fishery products during the early part of 1953 was about as large as a year earlier, and is expected to continue at the 1952 rate at least through mid-year. Retail prices, judging from trade reports from important wholesale markets, have been much lower than in the comparable months of 1952. Current indications are that retail prices for fresh and frozen products as a group during the spring and early summer may be considerably below those in the same part of last year, while those of the canned commodities may be slightly lower.

The commercial catch of fish and shellfish during January-March 1953 was somewhat smaller than in the first quarter of 1952. In some areas the size of the catch was limited by the availability of fish, as in the case of shrimp for the Gulf Coast States; in other areas (principally the Northwest) the relatively low prices paid to fishermen discouraged commercial fishing activity.

Commercial freezings of fishery products in the United States and Alaska during the first quarter of this year totaled almost 29 million pounds, down 18 percent from output in the comparable part of 1952. Freezings of shrimp and haddock fillets were sharply lower thus far in 1953 than a year earlier. Total output of frozen fish and shellfish is expected to increase by mid-1953, reflecting the seasonal increase in commercial landings.

Record stocks of frozen fishery products in cold storage in the United States and Alaska on April 1 totaled 119 million pounds, 4 percent above a year earlier. An unusually large proportion of the total stocks on April 1 was made up of frozen halibut and frozen fillets of cod, haddock, and ocean perch.

About the same volume of canned fishery products has been available thus far this year as in the same part of 1952, when supplies were relatively light. The larger supplies of canned tuna, Maine sardines, mackerel, and anchovies were more than offset by smaller quantities of canned salmon and the scarcity of California sardines.

Current prospects are that supplies of canned fish and shellfish will total nolarger than in 1952 at. least until late summer, when the new packs of most products start moving into domestic distribution in volume.

Imports of frozen groundfish and ocean perch fillets, a very important group among the fishery products received from abroad, totaled 16 million pounds during

January and February 1953, about 15 percent smaller than a year earlier. Imports of these products during the next few months will be large, but are not expected to equal total receipts during the same part of 1952.

Exports of edible fishery products during January and February, especially of the canned commodities, were somewhat below the relatively snall volume of a year earlier. During the spring months, exports may not exceed those of a year earlier because of the comparatively small domestic supplies of canned salmonand California sardines (pilchards), especially of the latter.

This analysis appedred 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 April-June 1953 issue of the National Food Situation.

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## Metal Cans--Shipments for Fishery Products, January 1953

Total shipments of metal cans for fish and sea food in January 1953 amounted to 3,875 short tons of steel-- 30 percent less than the 5,500 short tons shipped in December 1952, but 4 percent more than the 3,743 short tons shipped in January 1952. This is based on a March 24 report issued by the Bureau of the Census.
NOTE: STATISTICS COVER ALL COMMERCIAL AND CAPTIVE PLANTS KNOWN TO PE 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 FACTCR: 23.0 BASE BOXES OF STEEL EQUAL ONE SHORT TON OF STEEL.


## North Atlantic Fishery Investigations

"ALBATROSS III" COLLECTS SAMPLES FOR OCEAN PERCH LIFE-HISTORY STUDY (Cruise No. 45): A small sample of very small ocean perch ( $54-80 \mathrm{~mm}$ ) was collected by the research vessel Albatross ,III operated by the Service's Branch of Fishery Biology. The cruise to the western part of the Gulf of Maine commenced on March3. The small ocean perch samples were sought for life-history studies and to endeavor to determine the vertical distribution of ocean perch at night. No ocean perch were caught during night-fishing operations. These small sizes were previously unobtainable and are valuable for age and growth studies. The vessel returned to Woods Hole on March 11.

Extremely rough weather and the unfortunate loss of fishing gear did much to hamper fishing. Although the small ocean perch were not collected in the quantities hoped for, some concentrations of small haddock ( $13-18 \mathrm{~cm}$.) were found and specimens were collected which may prove valuable for haddock food study work.
"ALBATROSS III" COLLECTS HADDOCK EGGS AND LARVAE (Cruise No. 46): Approximately 3,000 miles of continuous plankton tows were made on Georges Bank and the Gulf of Maine by the Service's research vessel Albatross III to collect samples and data to determine the distribution of haddock eggs and larvae. Operated by the Branch of Fishery Biology, the vessel made tows at the surface and 10 -meter depths with Hardy Plankton Recorders. Continuous salinity and temperature records were also obtained. A total of 800 drift bottles were releasedthroughout the area.

Large concentrations of eggs were found on the Northeast peak of Georges Bank, in South Channel, and on Browns Bank. Some of the egg samples were hatched out for identification purposes. The data have yet to be analyzed. It is believed a very complete coverage was made of the area of concern.


## Pacific Oceanic Fishery Investigations

"CHARLES $H$. GILBERT" STUDIES TUNA DISTRIBUTION AND MOVEMENTS IN HAWAIIAN AREA (Cruise 7): The study of the winter distribution and movements of surface tuna schools in the Hawaiian area in relation to temperature and related phenomena was carried out by the Service's research vessel Charles $\underline{H}$. Gilbert on a 19-day cruise completed at Honolulu on February 14. Also, tests were conducted with fish attractants, bait tank aeration, and the use of the hydrophone and recorder for tuna detection. Live small yellowfin were obtained and delivered to the Coconut Island ponds in Hawaii in good condition.

Notable concentrations of small schools of skipjack tuna attended by birds were encountered west of the Kona coast to more than 100 miles from land, and southwest of Lanai. Replicate passes in opposite directions along each leg of the cruise were made to provide a basis for estimating the variability in counts of flocks and schools in a given area. Preliminary inspection of the data indicates significant variations in counts of flocks and schools with vessel direction, from area to area, and from day to day, but not with time of day. A possible explanation for some of the variability lies in the assumption of a systematic northeasterly movement of schools into the area south of the islands during the period of the survey. Abrupt surface temperature discontinuities north of Oahu and southwest of Lanai were found and sectioned by bathythermograph lowerings in close succession.

Preliminary tests with a fish attractant solution mixed with fluorescein were carried out north of Oahu. Reactions of the fish were not observed. Bait-tank aeration by a compressed air jet was found to be efficient as a means of holding live bait during dead-ship experiments with the hydrophone. Mechanical failure cancelled the sole opportunity to use the hydrophone in an area where skipjack tuna were abundant.

STEEL-WIRE LONG-LINE GEAR TESTED BY "CHARLES H. GILBERT" (Cruise 10): There appears to be no significant difference between the behavior of cotton and steel long-line gear in the water, according to tests made by the Pacific Oceanic Fishery Investigations' research vessel Charles $\underline{H}$. Gilbert. On this 4 -day cruise, completed at Honolulu on March 26, the vessel operated of $f$ the Kona coast and SW. of Lanai. The tests with the steel-wire gear were made in these areas at three fishing stations. Three big-eyed tuna, two sharks, and one manimahi were takenon the wire gear.

Tests of cotton long-line gear treated with Stockholm tar were made, but results were inconclusive. Newly-tarred gear was difficult to handle with the longline hauler. During the latter part of the cruise, as excess tar was washed from the line, an improvement was noted. Additional tests are necessary to showwhether or not tar is suitable as a long-line preservative.

Sea tests of two types of experimental plastic depth gauges were made by lowering gauges to various depths with a 900 -foot BT. Each type of gauge, when lowered several times to the same level, showed uniform readings with small differences between successive trials; however, calibration corrections or differences between individual gauges were very large。
"JOHN R. MANNING" MAKES EXCELLENT YELLOWFIN TUNA CATCHES NEAR EQUATOR (Cruise No. 14): Excellent long-line catches of yellowfin tuna were made in the Pacific equatorial zone by the POFI research vessel John $\underline{R}$. Manning on a two-months' experimental fishing cruise completed at Honolulu on March 25. The deep-swimming tunas of the equatorial zone were sampled by fishing long lines at a series of stations southward across the equator in the vicinity of $150^{\circ} \mathrm{W}$. longitude. After refueling at Papeete, Tahiti, a second series of stations were fished along $140^{\circ}$ W. longitude on the homeward leg. Particularly good catches of yellowfin were made in the latter section where catch rates ran as high as 17 tuna or about one ton per 100 hooks per day of fishing. This was more than twice the rate found on previous cruises in the same locality and 8 times greater than the average catch rate in Hawailan waters.

On both sections, the biggest catches were made within $1^{\circ}$ of the equator. The apparent abundance of tuna was much higher on $140^{\circ} \mathrm{W}$. longitude than on $150^{\circ}$ W. longitude. The average tuna catch (all species) per 100 hooks per day's fishing for eight stations between $4^{\circ} 30^{\prime} \mathrm{N}$. and $4^{\circ} \mathrm{S}$. on $150^{\circ} \mathrm{W}$. longitude was 3.48 fish as compared with an average of 8.72 fish for eight stations between the same latitudes on $140^{\circ} \mathrm{W}$. longitude. The average yellowfin catch rates for, the same two series of stations were 2.75 and 7.49 fish, respectively.

To show the diurnal variation in availability of tunas to long-line fishing and the effect of soaking time on the long-line catch, a series of four special stations was fished near the equator--two 12 -hour stations and one 24 -hour station on the $150^{\circ} \mathrm{W}$. longitude section and one 24 -hour station on the $140^{\circ} \mathrm{W}$. longitude line. Although these experiments were carried out at locations which had afforded good catches during the preceding day, the results were generally poor and toofew fish were caught to contribute much information on the questions under study. Sharks and bait-stealing organisms, probably squid, were found to be much more active during the night than in the daytime.

A total of 40 albacore, ranging in weight from 30 to 50 pounds, were taken, zll of them south of the equator. On the $150^{\circ} \mathrm{W}$. longitude section, albacore were zaught at all of the stations from $l^{\circ}$ S. to $15^{\circ} 30^{\prime}$ S. latitude, the last station before Tahiti. But on the return voyage, they were taken only at the two southernmost stations, at $13^{\circ} 30^{\prime} \mathrm{S}$. and at $10^{\circ} 10^{\prime}$ S. latitude.

A total of 20 baskets of experimental long lines with l-fathom branch lines were used on the $150^{\circ} \mathrm{W}$. longitude section, in addition to the usual 40 baskets of standard gear. It appeared that these lines caught fish as well as the regular year, but a tendency for the short branch lines to wind up tightly during the haul nade the experimental gear slow and troublesome to handle.

The relation of the hooks to the thermocline was investigated by means of zcho-sounding, and the use of depth gauges on the line. The echo-sounding was Eairly successful and indicated a high degree of variability in line depth.

Information was collected ooncerning the small-scale tuna fishery of Tahiti rith a view to learning anything which might be profitably applied to fishery de-
velopment in the United States island territories in the Pacific. It was found that the Tahitian fishery has apparently been held back by the same obstacles of inadequate bait supplies, primitive fishing and canning methods, and distance from the major consuming areas which tuna-fishing enterprises elsewhere in the Pacific islands have encountered.


Status of American Samoa Shipments of Fishery Products

## to the United States

Certain questions have been raised regarding the status of American Samoa shipments of fishery products to the United States. Since a United States business firm may lease the tuna cannery situated in American Samoa, the possibility of such shipments may develop. In order to establish the status of such shipments and of fishery products landings at American Samoa ports by vessels of foreign registry, the Special Assistant to the Under Secretary of State requested an expression of opinion from the Commissioner of Customs. The reply by the Commissioner of Customs points out that:
(1) "...Canned tuna brought into the United States from Samoa is not subject to customs duties because it is not imported from a foreign country...."
(2) If legislation provided for a quota on fresh and frozen tuna imports into the United States, "it would not apply to imports into American Samoabecause American Samoa is not a part of the customs territory of the United States." However, "whether or not a quota on 'imports' of tuna would apply to shipments from Samoa of tuna landed there by a foreign country would depend on the answer to the question whether shipments from Samoa are 'importations' for tariff purposes. Since American Samoa is a possession of the United States, it is not a foreigncountry and shipments therefrom would not be importations into the United States, if the merchandise had actually been imported into Samoa as distinguished from passing through Samoa in transit...."
(3) "Except as otherwise permitted by treaty or convention, section 4311 of the Revised Statutes ( 46 U.S.C. 251), as amended by the Act of September 2, 1950 (64 Stat. 577), prohibits a foreign-flag vessel, whether documented as a cargo vessel or otherwise, from landing in a port of the United States its catch of fish taken on board on the high seas or fish products processed therefrom, or any fish or fish products taken on board such vessel on the high seas from a vessel engaged in fishing operations or in the processing of fish or fish products. The Bureau (of Custonis) is of the opinion that the statute does not apply to the landing of fish or fish products in any port of American Samoa. Accordingly, a Japanese flag mothership or fishing vessel, whether proceeding as such or as a cargo vessel direct from fishing grounds on the high seas, is not prohibited thereby from landing in American Samoa fresh or frozen tuna fish taken on the high seas, nor does such law prohibit a United States flag vessel from landing at American Samoa such a fish cargo acquired on the high seas by direct transfer from a Japanese flag mothership."


## U. S. Canned Packs of Selected Fishery Products, 1952

CALIFORNIA SARDINES (PILCHARD): The 1952 pack of California sardines (pilchard) of 106,746 standard cases was valued at $\$ 918,072$ to the canners. Compared

| Style of Pack | Quantity | $\begin{array}{\|l\|} \hline \text { Value to } \\ \text { Canners } \\ \hline \end{array}$ | Avg. Price Per Std. Case ${ }^{3}$ |
| :---: | :---: | :---: | :---: |
| Natural, without sauce or oill In tomato sauce Other ${ }^{2}$ Total . . . . . . | Std. Cases 3 | \% | ${ }^{4}$ |
|  | 34,933 | 251,545 | 7.21 |
|  | $67,001$ | $\left\lvert\, \begin{array}{r} 5 \\ 6 \\ 5 \end{array}\right., 267$ | $9.17$ |
|  | $4,812$ | $52,260$ | $10.86$ |
|  | 106,746 | 918,072 | 8.60 |
| 1 INCLUDES A SMALL <br> 2 INCLUDES SPECIAL oIl and tomato sa <br> $3 /$ Cases of various <br> ( 15 OUNCFS NET) | DUCTION OF FI CKS OF SARDINES CILE, AND FILETS zes converted al cans. | LLETS. <br> S IN MUSTA <br> IN A SPE <br> TO THE EQU | RD SAUCE, IN OLIVE CIAL SAUCE. IVALENT OF 4B 1-LB |


| Can and Case Sizes | Quantity | $\begin{array}{\|l\|} \hline \text { Value to } \\ \text { Canners } \end{array}$ | $\begin{array}{\|c\|} \hline \text { Avg. Price } \\ \text { Per Case } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: |
|  | ActualCases | \$ | \$ |
| 1-pound cans: 1 |  |  |  |
| 15 ounces net, oval |  |  |  |
| ( 48 cans) ......... | 65,420 | 588,681 | 9.00 |
| 15 ounces net, tall |  |  |  |
| ( 48 cans) ........... | 35,291 | 242,014 | 6.86 |
| 8 ounces net ( 48 cans) .. | 6,630 | 54,013 | 8.15 |
| 5 ounces net ( 100 cans ) .. | 3,917 | 33,364 | 8.52 |
| Total .............. | 111,258 | 1918,072 | - |

with 1951, this was a decrease of 96 percent in quantity and 95 percent in value. Sardines were canned in 26 plants in California in 1952. Pilchard fishing in 1952

| Year | Quantity | Value to Canners | Avg. Price Per Std. Case? |
| :---: | :---: | :---: | :---: |
|  | $\frac{\text { Std. Cases2/ }}{\text { 106,746 }}$ |  | , |
|  |  |  |  |
| 1951 | 2,864,984 | 19,362,744 | 6.76 |
| 1950 | 5,070,805 | 26,345,609 | 5.20 |
| 7949 | 3,768,212 | 21,334,825 | 5,66 |
| 1.948 | 2,654,149 | 21,892,893 | 8.25 |
| 7947 | 1,652,592 | 16,538,375 | 10.01 |
| 1946 | 2,977,170 | 19,895,649 | 6.68 |
| 7945 | 3,765,981 | 15,346,472 | 4.08 |
| 1944 | 3,650,919 | 15,225,919 | 4.17 |
| 1943 | 3,354,697 | 14,352,359 | 4.28 |
| 1942 | 3,744,624 | 15,509,964 | 4.14 |
| 1 PRELIMINARY <br> 2/CASES OF VARIOUS SIZES CONVERTED TO THE EQUIVALENT OF 48 1-LB. ( 15 OUNCES NET) OVAL CANS. |  |  |  | was almost a complete failure-the worst season in 37 years. 1/

Canners received an average price of $\$ 8.60$ per standard case in 1952 (table 2), an increase of $\$ 1.84$ over the 1951 price. The 1952 average price was the highest received by the canners since 1947, when it reached a record price of $\$ 10.01$ per case.

Table 3 indicates the trend in production in the periodsince 1942. The year-to-year fluctuation became more pronounced starting in 1946 and continued upthrough 1952.

1/SEE COMMERCIAL FISHERIES REVIEW, FEBFUARY 1953, P. 36.

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MACKEREL: The United States canned mackerel pack (including jack mackerel) in 1952 amounted to $1,525,353$ standard cases, valued at $\$ 11,362,697$ to the packers (table 1). This was an increase over the 1951 pack of 45 percent in quantity and 82 percent in value. The pack was up 46 percent in California and 39 percent in

| State | Style of Pack | Quantity | Value to Canners | $\begin{aligned} & \hline \text { Avg. Price Per } \\ & \text { Std. Case4 } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Maine | Natural | $\frac{\text { Std. Cases }^{4}}{2,022}$ | $\$$ | $\begin{aligned} & \mathbf{\$} \\ & \mathbf{\$ . 2 0} \end{aligned}$ |
| Massachusetts and Maryland | Natural | 20,098 | 235,837 | 11.73 |
| California2/ ............ | Natural | 1,479,099 | 10,817,944 | 7.31 |
|  | In tomato sauce 3 / | 24,134 | 292,332 | 12.11 |
| Total |  | 1,525,353 | 11,362,697 | 7.45 |
| 1/PRELIMINARY. $2 /$ INCLUDES JACK MACKEREL PACK. 3/INCLUDES A SMALL PACK IN A SPECIAL SAUCE. 4 /CASES OF VARIOUS SIZES CONVERTED TO THE EQUIVALENT OF 481 -POUND CANS TO THE CASE, EACH CAN CONTAINING 15 OUNCES. |  |  |  |  |

the Atlantic Coast States. In 1952 mackerel was canned by 28 plants inCalifornia, 4 plants in Maine, 2 in Massachusetts, and l in Maryland.

The bulk of the mackerel canned was put up in 15 -ounce cans and packed 48 cans to the case (table 2). This size pack comprised 95 percent of the total production in 1952.


The 1952 production of $1,525,353$ standard cases was the second highest in recent years, exceeded onlyby the 1947 pack of $1,754,950$ standard cases (table 3). The pack of canned mackerel in California has maintained a good level while pro-

| Year | Californial |  |  | Atlentic Coast |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Value to Canners | $\begin{aligned} & \text { Avg. Price } \\ & \text { Per Std.Case } \end{aligned}$ | Quantity | Velue to Canners | Avg. Price 3 Per Std. Case ${ }^{3}$ | Quantity | Value to Canners | AvE. Price ${ }_{3}$ Per Std. Case |
|  | $\frac{\text { Std. Cases3/ }}{1,503,233}$ | 11,110,276 | \$ ${ }^{\text {I }}$ | $\frac{\text { Std. Cases } 3}{22,120}$ | 252, ${ }^{\text {¢ }}$ | 塞 | $\frac{\text { Std.Ceses } 3 /}{1,525,353}$ | 11,362,697 |  |
| 1952 2 | $1,503,233$ | 11,110,276 | . 39 | 22,120 | $25 \overline{2}, 421$ | 11.41 | 1,525,353 | 11,362,697 | 7.45 |
| 1951 | 1,032,581 | 6,066,011 | 5.87 | 15,937 | 193,213 | 12.12 | 1,048,518 | 6,259,224 | 5.97 |
| 1950 | $1,393,492$ | $6,959,616$ | 4.99 | 63,556 | 532,200 | 8.37 | $1,457,048$ | 7,491,816 | 5.14 |
| 1949 | 916,810 | 5,766,415 | 6.29 | 133,117 | $1,082,515$ | 8.13 | 1,049,927 | $6,848,930$ | 6.52 |
| 1948 | $1,018,973$ | 7,541,931 | 7.40 | 262,219 | 2,308,903 | 8.81 | $1,281,192$ | $9,850,834$ | 7.69 |
| 1947 | $1,477,198$ | 12,571,059 | 8.51 | 277,752 | 2,447,574 | 8.81 | 1,754,950 | 15,018,633 | 8. 56 |
| 1946 | 723,688 | 5,599,894 | 7.74 | 238,462 | $1,975,397$ | 8.28 | 962,150 | 7,575,291 | 7.87 |
| 1945 | 638,191 | 3,590,614 | 5.63 | 54,557 | 456,077 | 8.36 | 692,748 | 4,046,691 | 5.84 |
| 1944 | 992,280 | 5,096,749 | 5.14 | 232,780 | 1,937,248 | 8.32 | 1,225,060 | 7,033,997 | 5.74 |
| 1943 | 831,660 | $4,379,996$ | 5.27 | 105,591 | 891,207 | 8.44 | 937,251 | 5,271,203 | 5.62 |
| 1942 | 616,436 | 3,000,604 | 4.87 | 104,753 | 692,478 | 6.61 | 721,189 | 3,693,082 | 5.12 |
| 1/INCLUDES JACK MACKEREL PACK. 3 /PRELIMINARY. |  |  |  |  |  |  |  |  |  |

duction in the Atlantic Coast States has declined sharply. The mackerel fishery along the Atlantic Coast the past few years has been very poor and the catch has been only a small percentage of former years.

Because of the failure of the sardine fishery in California in 1952, packers in that State have concentrated on packing mackerel. On the other hand, since 1949 mackerel canning on the Atlantic Coast has shown a steady decline due principally to the scarcity of mackerel in the Atlantic.

Demand for canned mackerel in 1952 was considered good and prices were higher than for the past several years. The average canners' price for 1952 in California was $\$ 7.39$ per standard case--substantially higher than in 1951 and for any year since 1949. A steady export demand for canned mackerel helped to maintain the price On the other hand, Atlantic Coast packers sold canned mackerel in 1952 at an average price of $\$ 11.41$ per standard case--somewhat lower than the record price of $\$ 12.12$ per case received in 1951. The price in 1952, however, was the second highest price on record.

OYSTERS: In 1952, the United States pack of canned oysters totaled 541,126 standard cases, valued at $\$ 7,186,450$ to the processors (table 1). This was an

| Table l-U. S. Canned Oyster Pack, by State, 1952l/ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| State | Quantity | Value to <br> Canners | Avg. Price <br> Per |

increase of 16 percent in quantity and 21 percent in value as compared with the 1951 pack. The Atlantic and Gulf States processed 79 percent of the pack, and

| Can and Case Size | Quantity | Value to Canners | Avg. Price Per Case |
| :---: | :---: | :---: | :---: |
|  | Actual Cases |  | \$ |
| 4-2/3 ounces net ( 48 cans) | $\begin{aligned} & 124,060 \\ & 373,746 \end{aligned}$ | $\begin{array}{r} 93,152 \\ 4,923,842 \end{array}$ | $\begin{array}{r} 7.55 \\ 13,17 \end{array}$ |
| $6-1 / 2$ ounces net (24 cans) | 100,401 | 906,820 | 9.03 |
| $5-1 / 2$ ounces net (48 cans) | 16,152 | 265,640 | 16,45 |
| Other sizes (converted to standard cases) | 12,930 | 153,996 | 11.91 |
| Total | 627,289 | 7,186,450 | - |
| 1/PRELIMINARY. |  |  |  |

the states of Washington and Oregon the remaining 21 percent. Oysters were canned in 16 plants in Mississippi, 14 in Louisiana, 5 in Washington, 4 in South Carolina,

| Table 3-U.S. Canned Oyster Pack, 1942-52 |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | Atlantic and Gulf States | Pacific coast States | Total |
|  | ...... (Standard Cases $2 /)$ |  |  |
| 19521 | 428,711 | 112,415 | 541,126 |
| 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 |
| 1942 | 445,782 | 77, 480 | 523,262 |

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.

3 plants each in Alabama and Oregon, and $l$ in North Carolina.

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

The 1952 canned oyster pack of 541,126 standard cases was the highest since 1942 (table 3). The pack has been maintained at a fairly steady level since the end of World War II.

The packers received an average price of $\$ 13.28$ per standard case for the 1952 pack, compared to $\$ 12.72$ in 1951, \$14.41 in 1950 and 1949, and \$13.38 in 1948.

ALEWIVES: The 1952 U. S. pack of canned alewives amounted to 79,861 standard cases, valued at $\$ 374,680$ to the canners (table l). This is a decrease of 37

| State | Quantity | $\begin{aligned} & \text { Value to } \\ & \text { Canners } \end{aligned}$ | $\begin{array}{\|l\|} \text { Avg. Price } 1 \\ \text { Per Std. Cese } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: |
|  | asesd |  |  |
| Maryland and North Carolina | 27,603 | 134,740 | 4. 58 |
| Virginia | 52,258 | 239,940 | 4.59 |
| Total | 79,861 | 374, 680 | 4.69 |
| 1/CASES OF VARIOUS SIZES CONVERTED TO THE EQUIVALENT OF 48 CANS WITH A NET WEIGHT OF 15 OUNCES EACH. PRACTICALLY THE ENTIRE 1952 PACK WAS CANNED IN 15-OUNCE CANS |  |  |  |

percent in quantity and 38 percent in value as comparedwith the previous year.

Alewives were canned in 1952 by 4 plants in Maryland, 10 in Virginia, and 2 in North Carolina.

| Year | Quantity | $\begin{aligned} & \text { Net } \\ & \text { Weight } \end{aligned}$ | Value to Canners | AVg. Price Per Std.Case2 |
| :---: | :---: | :---: | :---: | :---: |
|  | Std.Cases 2 | Lbs. | 3 | 3 |
| 19521/ | 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 |
| 1947 | 139,816 | 6,291,720 | 779,150 | 5.57 |
| 1946 | 193,980 | 8,729,100 | 1,180,197 | 6.08 |
| 1945 | 131,062 | 5,897,790 | 753,769 | 5,75 |
| 2944 | 135,995 | 6,119,775 | 793,254 | 5.83 |
| 2943 | 112,472 | 5,061,240 | 619,213 | 5.51 |
| 1942 | 77,232 | $3,475,440$ | 399,555 | 5.17 |

1 /PRELIMINARY.
2/CASES OF VARIOUS SIZES CONVERTED TO THE EQUIVALENT OF 48 C. CANS WITH A NET WEIGHT OF 15 OUNCES EACH.

There has been an almost constant decline in the canning of alewives since the peak year of 1946 (table 2). However, there was a good production in 1951 and a sharp decline in 1952.

Canners received an average of $\$ 4.69$ per standard case for the 1952 pack, one percent less than the $\$ 4.73$ received in 1951. Since 1942, only in 1949 ( $\$ 4.19$ ) and in $1950(\$ 4.56)$ did lower prices prevail. A record-high price ( $\$ 6.08$ ) was received by canners in 1946.

| Year | Quantity | Value to Canners | Avg. Price Per Std.Case 2 |
| :---: | :---: | :---: | :---: |
| 1952l/ | $\frac{\text { Sta.Cases } 2 /}{\text { 29,333 }}$ | \$9,027 | $\underline{I}$ |
| 1951 | 19,639 | 312,445 | 15.91 |
| 1950 | 18,490 | 289,630 | 15.66 |
| 1949 | 32,365 | 506,224 | 15.64 |
| 1948 | 35,014 | 548,113 | 15.65 |
| 1947 | 18,560 | 303,831 | 16.37 |
| 1946 | 151,886 | 2,107,446 | 13.88 |
| 1945 | 157,135 | 2,332,176 | 14.84 |
| 1944 | 92,950 | 1,318,167 | 14.18 |
| 1943 | 33,318 | 497,815 | 14.94 |
| 1942 | 83,729 | 1,011,382 | 12.08 |

$\frac{1}{2}$ PREL.IMINARY.
2/CASES OF VARIOUS SIZES CONVERTED TO THE EQUIVALENT OF 48 CANS TO THE CASE, EACH CAN CONTAINING 14 OUNCES.

GROUNDFISH FLAKES: The 1952 pack of canned groundfish flakes in the United States amounted to 29,333 standard cases, valued at \$479,027 to the packers. This was an increase of 49 percent in quantity and 53 percent in value, compared with the 1951 production. Maine and Massachusetts are the only states that produce canned groundfish flakes--canning in 1.952 was carried on by 4 plants in Maine and 2 plants in Massachusetts.

Canners received an average price of $\$ 16.33$ per case in 1952, an increase of 42 cents per case over 1951, and was exceeded only by the record price of $\$ 16.37$ in 1947.

## U. S. Production of Menhaden Products

Receipts of menhaden by manufacturers of menhaden products in the United States during 1952 amounted to $1,354,370,160$ pounds ( $2,052,076,000 \mathrm{fish}$ )--seetable 1.

|  |  |  | Products Manufacturect |  |  |  | Fnlue of Product: to Masufecturers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| States(No. of Plants in Parentheses) | Menhaden Utilized |  | Dry Sara | P and Menl |  |  |  |
|  | Quantity |  | Quantity | Product Value | Quantity | Product Falue |  |
|  | Lbs. | No. of | Tons | 1 | Gellons3/ | $\underline{1}$ | 1 |
| Maine (1) and Massachusetts (3) | 26,520,120 | 40,182,000 | 2,652 | 334,060 | 364,898 | 177,035 | 511,095 |
| New York (1), New Jersey (3), and Delawere (2) .......... | 470,457,240 | $712,814,000$ | 49,127 | 5,893, 848 | 5,072,635 | 2,353,445 | 6,247,293 |
| Virginia (5) . . . . . . . . . . . . | 97, 074,780 | 147,083,000 | 10,965 | 1,422,000 | 325,332 | 163,720 | 1,5e5,720 |
| North Carolina (10) and South Carolinn (1) ................. | 189,022,680 | 286,398,000 | 19,509 | 2,536,050 | 1,037,914 | 464,266 | 3,000,316 |
| Floridn (3) and Texas (2) | 180,946,260 | 274,161,000 | 2/20,002 | $2 / 2,402,048$ | 778,909 | 316,062 | 2,718, 110 |
| Mississippi (3) | 111,205,380 | 168,493,000 | 11,873 | 1,510,530 | 1,717,714 | 1824,707 | 2,335,237 |
| Loulsiana (4) | $279,143,700$ | 422, 945,000 | 29, 717 | $3,727,225$ | 3,419,894 | $1,428,816$ | 5,156,041 |
| Total (38) | , 354, 370, 160 | 2,052,076,000 | 143,845 | $17,825,76$ | 12,737,296 |  |  | 1 dofs not include the production of menhaden solubles.

$2 / A$ SMALL PRODUCTION OF ACIDULATED SCRAP MAS BEEM INCLUDED WITM THE DRY SCRAF AND MEAL.
$3 / \mathrm{A}$ GALLON OF OIL WEIGHS 7.74 POUNDS.
This was the fifth successive year that the catch exceeded one billion pounds. The catch of menhaden by fisherinen since the founding of the nation has been far greater than that of any other species. Available data for most of the last 79 years indicate that about 38 billion pounds of menhaden were taken for manufacture into meal and oil. Table 2 shows the rapid growth of the menhaden fishery in recent years.

| Year | Menhaden Utilized | ProductaManufactured |  |  |  |  |  | Value of Products to Manuracturers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Dry Scrap and Meal |  | \| Acidulated Scrap |  | 011 |  |  |
|  |  | Quentity | Value |  |  | Quantity | Value |  |
|  | Lbs. | Tons |  | T |  | Gallons | 5, |  |
| 1952 | 1,354,370,160 | $1 \overline{43,845}$ | 17,825,761 |  |  | 12,737,296 | 5,728,051 | 25,553,812 |
| 1951 | 1,103,914,780 | 115,464 | 13,879,523 |  |  | 12,537, 115 | 9,771,154 | 23,650,67? |
| 1950 | $1,000,497,734$ | 103,365 | 12,864,751 |  |  | 10,209,958 | 5,866,554 | 18,731,305 |
| 19 | 1,072,630,265 | 113,393 | 17,813,339 |  |  | 8,293,911 | 3,407,510 | 21,290,849 |
| 19 | 1,007,888,840 | 104,058 | 11,560,914 |  |  | 8,763,939 | 10,13:,179 | 21,693,093 |
| 1947 | 948,155,592 | 98,602 | 10,883,852 | 632 | 26,863 | 8,473,371 | 11,425,497 | 22,336,212 |
| 1946 | 916,013,079 | 94,622 | 8,605,118 | 2,022 | 78,475 | 9,758,648 | 9,033,032 | 17,716,625 |
| 19 | 759,073,820 | 77,451 | 5,483,377 | 1,577 | 62,200 | 8,335,094 | 5,656,550 | 11,202,127 |
| 19 | 685,980,170 | 69,170 | 4,913,224 | 2,922 | 111,104 | 6,067,111 | 3,725,498 | 8,749,826 |
| 1943 | 615,554, 460 | 66,357 | 4,766,672 | 1,555 | 58,821 | 5,734,668 | 3,892,142 | 8,717,635 |
| 1942 | 482, 643,880 | 50,504 | 3,362,279 | 2,594 | 80,520 | 5,128,760 | 3,200,129 | 6,642,92 |

$\frac{1}{2} /$ A SMALL PRODUCTION OF ACIDULATEO SCRAP HAS BEEN INCLUDED WITH DRY SCRAP AND MEAL.
$2 / \mathrm{A}$ GALLON OF OIL WEIGHS 7.74 POUNDS.

## U. S. Fish Oil Exports, 1952

United States inedible fish oil exports in 1952 declined 12 percent from 1951 and 42 percent from 1950 (see table), reports the March 23 Foreign Grops and Markets of the Department of Agriculture. Shipments amounted to 21,981 short tons, compared with 24,920 and 37,987 tons, respecilvely, in the 2 previous years. About 94 percent of the total was sold to Europe. More than one-half ( 11,697 tons) of the over-all total went to the Netherlands. Western Germany purchased almost onefourth (5,134 tons) of the total.


## Utilization of U. S. and Alaska Catch <br> of Fishery Products, 1952

Preliminary data reveal that the total catch of fishery products in the United States during 1952 amounted to 4.3 billion pounds (round weight), compared with

Utilization of U.S. and Alaska Catch of Fishery Products, 1948-52 (Round Weight Basis)

| Year | Fresh and <br> Frozen | Canned | Cured | Byproducts <br> and | Batal |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $19521 /$ | 1,518 | 1,257 | 100 | 1,425 | 4,300 |
| $1951 / 1 /$ | 1,692 | 1,366 | 100 | 1,242 | 4,400 |
| 1950 | 1,692 | 1,720 | 100 | 1,372 | 4,884 |
| 1949 | 1,629 | 1,663 | 100 | 1,404 | 4,796 |
| 1948 | 1,663 | 1,488 | 100 | 1,324 | 4,575 |
| $1 /$ PRELIMINARY. |  |  |  |  |  | 4.4 billion pounds in 1951 (see table). Of the 1952 catch, 35.3 percent was utilized fresh and frozen as compared with 38.5 percent in 1951 and 34.6 percent in 1950. Due to record catches of menhaden, the byproducts and bait industries used 33.2 percent of the catch in 1952 as compared with 28.2 percent and 28.1 percent in 1951 and 1950, respectively. The failure of the California pilchard (sardine) fishery reduced the amount of the 1952 catch processed into canned fish to 29.2 percent as against 31.0 percent in 1951 and 35.3 percent in 1950. The remaining 2 percent of the total catch was cured.

## Wholesale and Retail Prices

WHOLESALE PRICES, FEBRUARY 1953: Prices for edible fishery products at the wholesale level were down in February. Unusually mild weather, particularly on the Atlantic Coast, brought aboutincreased fishing activity and a good supply of fish and shellfish. Furtherdeclines in meat prices, especially beef, also was a factor in keepingfish prices down. The over-all edible fish and shellfish (fresh, frozen, and canned) wholesale index for February was 108.0 percent of the 1947-49 average (see table)--3.3 percent lower than in Janwary and 0.2 percent less than in February 1952, the Bureau of Labor Statistics of the Department of Labor reports.

Prices dropped for all salt-water fish included in the drawn, dressed, or whole finfish subgroup. On the other hand, fresh-water fish
 prices rose except for whitefish prices at New York City which also dropped. Compared with a year ago, prices in this subgroup were mostly down. From January to February fresh large drawn offshore haddock at Boston dropped 14.2 percent because of heavier landings. There were slight pricedeclines at New York City for frozen Western halibut and salmon, and a 32.6-percent decrease inwhitefish prices. Drawn,

dressed, or whole finfish prices for February on the whole were down 4.5 percent from January and 5.2 percent below February 1952.

Fresh processed fish and shellfish prices declined 4.2 percent from January to February. During this period haddock fillets at Boston went down 18.2 percent, but fresh large shrimp rose 2.0 percent due to light supplies and a strong market. Compared with a year earlier, prices in this subgroup were 10.3 percent higher, principally due to shrimp prices which were 21.5 percent higher.

There was a mixed trend in the frozen processed fish and shellfish subgroup. Prices in general dropped 1.1 percent from January to February. Flounder fillet and large shrimp prices were higher, small haddock fillet prices were much lower (17.2 percent), while ocean perch fillet prices remained the same. Inventories of frozen flounder fillets and shrimp were light, while haddock fillet supplies were heavy. Cold-storage inventories of frozen groundfish fillets as a wholewere very large due to heavy imports in 1952. Most frozen fillet prices were down. This February's frozen shrimp prices were 37.4 percent higher than a year earlier and were respor.sible for the 1.3 percent over-all increase in the processed frozen fish and shellfish subgroup. Actually frozen flounder, haddock, and ocean perch fillet prices this February were considerably lower than in February 1952.

The canned fishery products subgroup index was the only one to show an increase ( 0.5 percent) from January to February, but it was slightly lower (1.1 percent) than in February 1952. Canned pink salmon prices remained steady at January levels, but all other canned fish prices in this subgroup rose. Compared with February 1952, canned fish prices showed a mixed trend. Pink salmon and California sardines were down slightly, while Maine sardines were down 22.7 percent. Canned light-meat tuna prices were up 12.7 percent because the market for this product was considerably stronger than a year ago.


## ALASKA FISHERIES, 1951

DO YOU KNOW THAT:
The commercial catch of fishery products in Alaska during 1951 totaled $407,726,696$ pounds, valued at $\$ 39,260,240--a$ decrease of 15 percent in quentity butan increase of 25 percent in value as compared with 1950. Salmon (276,588,312 pounds) was the leading species landed and
 comprised 68 percent of the total catch.

A total of 31,623 persons were engaged in the fishing industry in 1951--considerably more than the 27,544 engaged in 1950.

A total of 226 wholesale and manufacturing establishments operated in Alaska during 1951 as compared with 216 in 1950.

The value of products as prepared for market in 1951 decreased to $\$ 95,915,516$, a decline of 4 percent as compared with 1950.


[^0]:    It was announced that the Fish and Wildlife Service will coordinate the Commission's joint federal-state research program on striped bass. A Service scientist will visit the various states along the Atlantic coast to encourage and coordinate striped bass research among the state fishery agencies and laboratories. He will also conduct limited research on the racial composition of various striped bass stocks. The officials and scientists of the two sections were shown the new Striped Bass Compendium, sponsored by the Commission's Striped Bass Comnittee, and just published by the Bingham Oceanographic Laboratory of Yale University. This work summarizes all the data on the striped bass published to November 1949 and contains new material relating to Chesapeake Bay, the principal source of the Atlantic striped bass stock.

