

TRENDS AND DEVELOPMENTS

Additions to the Fleet of U. S. Fishing Vessels

A total of 40 vessels of 5 net tons and over received their first documents as fishing craft during February 1951--9 less than in February 1950. California led with 7 vessels, followed by the east coast of Florida and Washington with 6 vessels each.

Vessels Obtaining Their First Documents as Fishing Craft, February 1951					
Section	February		Two mos. ending with February		Total 1950
	1951	1950	1951	1950	
	Number	Number	Number	Number	Number
New England	1	1	3	5	36
Middle Atlantic	4	-	7	2	45
Chesapeake Bay	-	8	2	10	81
South Atlantic	8	7	16	18	153
Gulf	9	11	27	16	167
Pacific Coast	13	15	26	24	231
Great Lakes	-	2	1	2	12
Alaska	5	5	8	7	83
Hawaii	-	-	-	-	4
Total	40	49	90	84	812

NOTE: VESSELS HAVE BEEN ASSIGNED TO THE VARIOUS SECTIONS ON THE BASIS OF THEIR HOME PORT.



Alaska Fishery Investigations

HERRING FISHERY NOTES: Use of Log Books Recommended: A recommendation that log books be made a permanent procedure in collecting herring catch data is made by the Alaska Fishery Investigations of the Service's Branch of Fishery Biology. A report submitted to the Branch states that this method provides information on the amount of fishing time not now available from current delivery tickets.

The log books made it possible to obtain the catch-per-hour of fishing, a marked improvement over the catch-per-boat-day now used as a measure of abundance, in which fishing time is taken as the total elapsed time between the dates of first and last delivery. Information contained in the log of one vessel fishing 112 days in the Kodiak district follows:

ACTIVITY	HOURS	PERCENT
FISHING AND SCOUTING	885	33
TRAVELING TO AND FROM FISHING GROUNDS.....	348	13
ANCHORED TO OBTAIN REST.....	419	16
TIED UP BECAUSE OF STORMS OR FOG.....	587	22
UNLOADING FISH AT PLANT.....	203	7
REPAIRING VESSEL.....	246	9

Age Determinations: With the assistance of the age analysis project, the Investigations staff made age determinations from a sample of frozen herring from this year's pre-spawning run at Ketchikan. The age composition as represented by the 221-fish sample follows:

<u>YEAR CLASS</u>	<u>AGE</u>	<u>PERCENT</u>	<u>YEAR CLASS</u>	<u>AGE</u>	<u>PERCENT</u>
1949	3	10	1946	6	8
1948	4	23	1945	7	3
1947	5	52	1944	8	4

This composition differs considerably from that obtained in the past season from the reduction fishery in Chatham Straits area. Here the dominant year class was that of 1944 (33 percent) followed by that of 1947 (23 percent). In the Ketchikan sample the dominant year class is that of 1947 (52 percent), with the 1944 year class only 4 percent. The occurrence of a heavy run at Ketchikan dominated by the 1947 year class indicates good success of that year class at Ketchikan in contrast to less than average success in Chatham Strait area as judged from its contributions to the reduction fishery during its third and fourth years.



California 1951-52 Sardine Season Outlook Unfavorable

A bleak forecast has been made for the 1951-52 California sardine fishing season in an April 11 news release from the Bureau of Marine Fisheries, Division of Fish and Game. This conclusion was based on an analysis of catch figures from the past season in which practically no fish of the 1949 year class were caught off the California coast.

This means, according to the State Bureau, that a severe scarcity of two- and three-year-old fish, which contributed a large portion of the sardine catch in recent years, will be evident next season.

During the 1950-51 sardine season, the 1948 year class made up approximately 44 percent of the successful southern California catch, but only 10 and 16 percent of the northern and central California fisheries. The small tonnages landed at northern and central ports were largely supplied by 1947 and 1946 year classes.



California Sardine Reduction Quota for 1951-52 Announced

Sardine reduction regulations and quotas similar to those of the 1950-51 season have been set by the California Fish and Game Commission for the coming sardine fishing season.

Exercising its only regulatory power over the State's sardine fishing industry, the Commission limited the quantity of sardines to be used for reduction into oils and meals to 150,000 tons during the 1951-52 season.

No consolidation of reduction permits, which was authorized in recent years, will be allowed among the 97 permit holders this season.



California Studies Valuable Squid Fishery

The common squid has become such a valuable commercial fishery in California that it is now the subject of a thorough study by that State's Division of Fish and Game, according to a March 28 news release from that agency.

Since 1863, when Chinese fishermen rowed skiffs about Monterey Bay with a blazing torch at the bow to attract night-time schools of squid, the opalescent mollusk has come into its own as a source of food and fish bait. The search for squid (Loligo opalescens) has become so intense that the Bureau of Marine Fisheries has set up a fellowship study to learn more about the habits of this strange creature.

In a recent issue of the Divisions's quarterly magazine, California Fish and Game, Biologist W. Gordon Fields of Stanford University's Hopkins Marine Station presents a preliminary report on the increasingly valuable squid fishery.

New methods of preserving the catch are being developed as new markets become available. For many years this industry remained of minor importance, but since 1942 it has become one of the major fisheries of the Monterey Bay area.

Although squid is found from Puget Sound to Lower California, 99 percent is caught along the California coast and within a few miles of Monterey.

Fields remarks that the 19,000 tons of squid landed at Monterey in 1946 exceeded even the value of the sardine catch in the same region. Recently, demand for the frozen product has increased so that it alone takes up the entire catch.

There is a large investment in canneries, fishing boats, and equipment in the Monterey Bay area and a considerable population which depends upon the fishing industry for its livelihood. With men and equipment idle half the year and no assurances of adequate returns during the formerly lucrative sardine season, there is a tremendous pressure at present to develop other fisheries.

Of these, the squid is potentially one of the most valuable because it appears in huge numbers and because it may be captured and preserved by present methods and with existing equipment.

If the domestic market were to react more favorably to squid as an item on the Friday menu, or if economic conditions should permit export to foreign markets, a greater portion of the capacity of the sardine fishing industry might be turned towards squid. Therefore, Fields believes, protective measures might be needed to maintain the species adequately and yet allow the highest possible annual catch.

To attain these objectives, any regulations adopted would need to be based on full understanding of the biology of the squid. The present study was undertaken to obtain some of this information.



Chesapeake Bay Area Tests New Fish Container

The shortage and rising prices of wooden fish boxes has been a vexing problem for dealers in the Chesapeake Bay area, according to the Service's Fishery Marketing Specialist in Virginia. In an attempt to solve this problem, a new-type container is being tested in the Hampton, Virginia, area.

In its present form the new container is a waxed carton braced with wooden strips. Its weight and cost are substantially less than the wooden box now commonly in use. In addition, its insulating properties are reported to assure a saving in ice. However, the new container is designed to last for only one shipment.

A sample box filled with fish and ice was kept for one week on the dock, and after that period it was examined. No deterioration was noted. The box is going to also be tested under actual shipping and handling conditions. If it stands up well under these conditions, plans call for the expansion of production facilities for this type of container.



Danish Trout Identified as Rainbow Trout

Trout and brook trout from Denmark appearing in Michigan retail markets have been tentatively identified as rainbow trout, the Michigan Conservation Department disclosed in an April news release.

Under the conditions in which brook, brown, and rainbow trout can be sold in Michigan, the Department cautions that a commercial trout license is required. It is illegal to sell any of these trout in Michigan unless they have been produced in a commercially-licensed hatchery or purchased from outside the State.



Federal Purchases of Fishery Products

FRESH AND FROZEN FISH PURCHASES BY DEPARTMENT OF THE ARMY, February and March 1951: For military feeding of the U. S. Army, Navy, Marine Corps, and Air Force, the Army Quartermaster Corps made the following purchases of fishery products: during February 1951, a total of 2,150,482 pounds; during March 1951, a total of 2,062,200 pounds (see tables 1 and 2). February purchases as compared with the previous month increased 26.1 percent in quantity and 27.7 percent in value, while March as

Table 1 - Purchases of Fresh and Frozen Fishery Products by Department of the Army (February and the First 2 Months, 1951 and 1950)

Q U A N T I T Y				V A L U E			
February		January-February		February		January-February	
1951	1950	1951	1950	1951	1950	1951	1950
lbs.	lbs.	lbs.	lbs.	\$	\$	\$	\$
2,150,482	573,730	3,855,610	1,743,503	934,934	267,139	1,667,307	767,111

compared with February declined 4.1 percent in quantity and 12.2 percent in value. When considered with the corresponding months of the previous year, February 1951 purchases were greater by 274.8 percent in quantity and 250 percent in value.

March also increased over its 1950 counterpart by 149.9 percent in quantity and 95.4 percent in value.

A comparison of purchases for the first 3 months in 1950 and 1951 shows that in the latter year there was an increase of 130.4 percent in quantity and 109.6 percent in value. Undoubtedly, this new impetus of Quartermaster buying is a result of the expansion of the Armed Forces.

Table 2 - Purchases of Fresh and Frozen Fishery Products by Department of the Army (March and the First 3 Months, 1951 and 1950)

Q U A N T I T Y				V A L U E			
March		January-March		March		January-March	
1951	1950	1951	1950	1951	1950	1951	1950
lbs.	lbs.	lbs.	lbs.	\$	\$	\$	\$
2,062,200	825,341	5,917,810	2,568,844	821,164	420,349	2,488,471	1,187,460

In addition to Quartermaster purchases, the Navy during the first three months this year purchased locally 84,000 pounds of fishery products which have not been included in the above figures.

CANNED FISHERY PRODUCTS 1952 REQUIREMENTS ANNOUNCED FOR ARMED FORCES: Estimated requirements of canned fishery products to meet the needs of the Armed Forces during the fiscal year ending June 30, 1952, were announced on April 17 by the Department of Defense. The estimated total requirements are 22,400,000 pounds, and by type they are as follows:

Type of Canned Fish	Quantity	
	In lbs.	In Standard Cases (Est.)
Salmon	17,300,000	360,400 (Case of 48 1-lb. cans)
Shrimp	400,000	30,000 (Case of 48 5-oz. cans)
Tuna	4,700,000	223,800 (Case of 48 7-oz. cans)

The canned tuna and salmon will be procured on an annual basis by the Quartermaster Purchasing Division, Oakland Quartermaster Procurement Agency, Oakland Army Base, Oakland 14, California; and the canned shrimp will be locally procured as required by stations throughout the country.

These estimates, prepared by the Army Quartermaster Corps, are tentative and subject to modification. They are announced in order to assist industry in planning production. These requirements are in addition to requirements for operational rations, and purchases made by stations locally as required.

The canned salmon and tuna are for consumption during the calendar year 1952 with the necessary quantities remaining on hand at the end of the calendar year to provide a carry-over until the next year's supplies are available.



Fishery Biology Notes

NEW VESSEL FOR SHELLFISH STUDIES IN LONG ISLAND SOUND: The U. S. Fish and Wildlife Service on March 28 launched a new vessel, the Shang Wheeler, at West Haven, Connecticut. This vessel will be used by the Service's Branch of Fishery Biology Shellfish Laboratory at Milford, Connecticut, to study the shellfish in Long Island Sound, as well as their enemies, such as oyster drills and starfish.

The topside of the 25-ton vessel comprises a workdeck aft (equipped with two hoists for dragging); the pilot's cabin, with a bunk; and between them, a compact laboratory. The laboratory has a sink, a gas stove, and three workbenches, each with storage cabinets above and below. The laboratory will permit on-the-spot examination of specimens. Located below the deck are the engine room (housing a six-cylinder 165-horsepower Diesel engine); a galley; a bunkroom with two wall beds and two closets; and, in the triangular forepoint, a lavatory. The craft, which will cruise at 10 miles an hour, has a circulating hot-water heating system and an electric plant. The ship is 50 ft. 10 in. long, has a beam of 14 ft. 9 in., and a draught of 4 ft. 9 in. Copper reinforces the craft at the water line to withstand ice. The vessel made its shakedown cruise the latter part of April.

* * * * *

HATCHING AND REARING SALMON IN RESERVOIR WATER: The Service's Dorena Dam Experimental Hatchery, Cottage Grove, Oregon, was designed to test the possibility of hatching and rearing salmon and trout in water derived from reservoir storage. Three 8-inch pipelines supply water from elevations of 765, 785, and 805 feet of the impoundment of Dorena Dam, which has a normal pool elevation of 835 feet and the tail water is 728 feet. Installations were designed to utilize both aerated and nonaerated water from the bottom level, the top level, and a selected mixture of all to maintain an optimum desired temperature. Twenty-two troughs, 24 6-foot circular tanks, a feed room, an office room, and refrigeration equipment have been installed in the building.

Last September the Service's Fishery Research Biologist in charge of the hatchery obtained from the Oregon Fish Commission hatchery on South Santiam River about 2,100 spring chinook salmon fingerlings and 2,455 silver salmon fingerlings from their hatchery on Alsea River. Also in September, 18,975 spring chinook eggs from the Oregon Fish Commission's South Santiam River hatchery and about 27,000 fall chinook eggs from the Fish and Wildlife Service's hatchery at Little White Salmon River were obtained. Since he experienced some difficulty in transporting 57,192 silver salmon eggs in December from the Oregon hatchery at Big Creek, an additional shipment was obtained at the Oregon Fish Commission's Coos River hatchery in January of this year.

Shortly after arrival of the chinook eggs, a heavy mortality occurred, possibly because of high temperatures of the water supply. In late September, the reservoir had been drawn sufficiently to permit surface water of the impoundment to pass through all hatchery outlets of the dam. This meant that water temperatures exceeded 60° F. for the first three weeks of the incubation period. As a result, the stock of spring chinook dropped to 901 on February 28. The mortality largely occurred early in the experiment and has since diminished to a very small amount. Fall chinook eggs obtained at the same time also experienced high mortality; 7,506 fingerlings remained on February 28. The growth of both lots of fish was normal in March.

The spring chinook and silver salmon fingerlings of the 1949 brood have been maintained in a fairly good condition. On February 28 there were 1,687 spring chinook and 2,436 silver salmon fingerlings.

The silver salmon eggs received at the hatchery on December 6 were divided into two lots because two methods of shipment were used. Of the 28,299 shipped in burlap, 22,566 arrived in good condition; 21,217 remained on February 28. Of the 28,893 shipped in sealed jars, 25,327 arrived in good condition; 24,252 were on hand on February 28. The entire 13,590 eyed-eggs, shipped from the Coos River hatchery on January 3, arrived in good condition; 12,732 hatched on February 28 and remained as fry. Of the 16,739 green eggs, shipped on the same day in sealed jars, 15,982 arrived in good condition; 12,806 remained on February 28.

On January 29, an additional shipment of 15,870 spring chinook fry from the South Santiam hatchery of the Oregon Fish Commission replaced the spring chinook which suffered extreme mortality at the time of the high temperatures.

The diet of all the fish consists of 50 percent beef liver, 20 percent beef spleen, and 30 percent salmon viscera. When the water becomes warmer, the diet will include meal.

During the winter the only assured water supply was that from the lower outlet whose temperature ranged from 50° F. to 34° F. with a mean of about 45° F. Connecting two of the 8-inch pipelines to the lower outlet assured ample water. Although the winter water supply has shown no evidence of having been harmful to the fish-cultural operations, the study has not continued long enough to permit any conclusions.

A larger refrigeration plant is planned for the near future because the present plant was inadequate to maintain sufficiently low temperatures during the late summer months of 1950. The coming summer program will include observations on the reservoir so that any unusual losses experienced in the hatchery possibly can be correlated with reservoir conditions.



Gulf Exploratory Fishery Program

GROOVED-SHRIMP EXPLORATIONS CONTINUED BY "OREGON" (Cruise No. 7): Explorations for commercial concentrations of grooved shrimp were continued by the Service's Gulf exploratory fishing vessel Oregon on its Cruise No. 7. The vessel left Pascagoula on February 14 and returned on February 28, 1951.

A search for trawlable areas between Cape San Blas and Cedar Keys failed to show any smooth and regular bottom sufficiently free of coral to permit safe trawling. A total of six trawls were either lost or severely damaged during short sample drags. Two drags were unsuccessful due to fouling of the gear.

Scattered small pink-grooved shrimp and a few white shrimp were taken in 6 to 12 fathoms off Cape San Blas. Drags in 15 fathoms off Cedar Keys failed to produce a single shrimp and resulted in badly damaged gear.

A series of 12 drags were made in depths of 104 to 305 fathoms south of Pensacola. One try with a 60-foot fish trawl showed a possible concentration of flounders at 110 fathoms, but the net was badly damaged and most of the catch was lost. Another try with a shrimp trawl in the same area produced 24 flounders that weighed 32 pounds. Several species, such as whiting (silver hake), anglerfish, and tilefish found in the North Atlantic trawl fishery were taken in trawls in depths of over 100 fathoms.

A drag in 305 fathoms with a 40-foot flat trawl produced 65 pounds of whiting (silver hake). Although this species has been taken often by the Oregon the catch has consisted of fewer and smaller fish. The average weight per fish was $1\frac{1}{2}$ pounds.

A series of trawls off the Mississippi delta in the area of the new shrimp fishery produced brown-grooved shrimp at the rate of about 50 pounds of heads-on shrimp per hour. This is approximately one-half the rate found last summer and fall.

* * * * *

CONTINUES TESTS OF SHRIMP-TRAWLING GEAR: Tests of shrimp-trawling gear will be continued by the Service's Gulf exploratory fishery vessel Oregon on Cruise No. 8. The vessel left on March 19 and is expected to return about April 14.

Most of the time the vessel will operate off the coasts of Louisiana and Texas between the 92nd and 94th meridians but some work will be carried on south of Aransas Pass, Texas, and near the mouth of the Mississippi River.

The Oregon will make a few exploratory drags over a wide range to get information on the seasonal change in concentrations of shrimp, but thorough exploration will be centered between the 92nd and 94th meridians off the coasts of Louisiana and Texas.



New Jersey Fishermen to Experiment with Danish-Type Otter Trawl

A plan is underway at Cape May, New Jersey, to begin experiments with a Danish-type otter trawl in an attempt to increase production. The two vessels to use the net now under construction are standing by, and it is expected that trials will begin in the near future, according to the Service's Fishery Marketing Specialist stationed in that State. This is the first time in several years that this type of gear will be employed in this area.

The men building this gear are working with the idea that by being able to regulate the depth of the gear in the water, fish populations moving between the bottom and the surface will be taken. This is an indication that bottom fish in this area are becoming scarce.

The new trawl will be used by personnel who have had considerable experience with it in Europe and who are quite confident of success.



North Atlantic Fishery Investigations

TRENDS IN THE NORTH ATLANTIC FISHERIES: New England scrod haddock landings in 1950 from Georges Bank consisted of 34,300,000 individual scrod (only 18,200,000 in an average year), and only 9,200,000 large haddock (18,700,000 in an average year). This new high resulted because the large 1948-year class contributed 29,000,000 two-year olds, of which 20,300,000 were below the 1-1/2-pound minimum market size; in an average year there are 5,000,000.

Yellowtail flounder were about as abundant in 1950 as in 1949. There is no indication of further decline in resource; the catch per day has remained stable the past few years. The switch to trash fishing for greater financial return caused the new low in the 1950 production.

Sea-scallop production and landed value remained at record-high levels. Preliminary catch-per-day figures indicate no appreciable decline in resource. Finding new beds as old ones become unproductive maintains the level.

Ocean perch (rosefish) landings at Gloucester, Massachusetts, to March 15 equal the 1949-1950 landings for the same period. Increased numbers of small fish are being brought in at Gloucester as a result of the "no-culling" policy.

The trash fishery remains at a high level. Sampling of the catch continues; commercial species in the catch are negligible, according to a report from the Service's North Atlantic Fishery Investigations.



North Pacific Exploratory Fishery Program

SHRIMP IN COMMERCIAL QUANTITIES LOCATED BY "JOHN N. COBB" IN ALASKAN WATERS (Cruise No. 7): On a third survey of a long-range program to study the shellfish potentialities of Alaskan waters, the John N. Cobb, one of the Service's exploratory fishing vessels, located commercial quantities of shrimp in the Icy Straits region. The vessel returned to Seattle on April 23 after a six-week cruise. Explorations on the previous two trips were conducted in the waters adjacent to the Ketchikan region and Baranof and Chichagof Islands.

Waters covered on the present investigations included Icy Straits, those surrounding the Juneau area, Lynn Canal, portions of Stephens Passage, and Seymour Canal. A 20-foot beam trawl was the principal gear used, although shrimp and crab pots were also fished. During the cruise, 134 fishing efforts were made.

Idaho Inlet in the Icy Straits region yielded excellent catches of pink (Pandalus borealis), side-stripe (Pandalopsis dispar), and coon-stripe (Pandalus hysinotus), shrimp. Three 30-minute tows in this inlet averaged better than 550 pounds per tow and were of good commercial size. Several drags in Port Frederick yielded 150 pounds of mixed pink and side-stripe shrimp, and a drag made outside of Hoonah in Icy Straits produced 170 pounds of large pink shrimp. Other areas investigated in Icy Straits included Pleasant Island and Excursion Inlet but these were less productive.

In the Juneau region, good catches of pink shrimp were made southwest of Point Tantalum and 30-minute tows averaged 350 pounds per tow. A number of other regions close to Juneau, including Young Bay, Fritz Cove, Auke Bay, and Taku Inlet, were also explored but showed only small numbers of shrimp.

In the Lynn Canal Area only light catches of shrimp were made in Taiya Inlet, while Lutak Inlet and Chilkat Inlet both showed fair concentrations of pink shrimp. Drags in Lutak Inlet averaged close to 180 pounds per 30-minute drag while one tow in Chilkat Inlet produced 145 pounds in a 30-minute tow.

South of Juneau fair catches were made in Seymour Canal and the best 30-minute tow from this area yielded 225 pounds of large pink shrimp. Drags made in Port Snettisham produced up to 225 pounds of mixed pink and side-stripe shrimp.

Shrimp pots set throughout the trip were generally not productive and only in Seymour Canal were any number of shrimp taken in the pots. The best pot set in this region yielded 83 large spot shrimp or prawn (Pandalus platycerus), after fishing for 19 hours.

The survey establishes the fact that commercial concentrations of shrimp exist at this season of the year in areas not now being exploited, such as Idaho Inlet and some of the other locations mentioned.

NOTE: SEE COMMERCIAL FISHERIES REVIEW, MARCH 1951, P. 17.



Pacific Halibut Fishery

FISHING REGULATIONS FOR 1951 ANNOUNCED: The 1951 halibut season in Pacific Coast waters opened May 1, and the International Fisheries Commission on April 17 announced the approval of the 1951 Pacific halibut fishing regulations by President Truman and the Governor General of Canada.

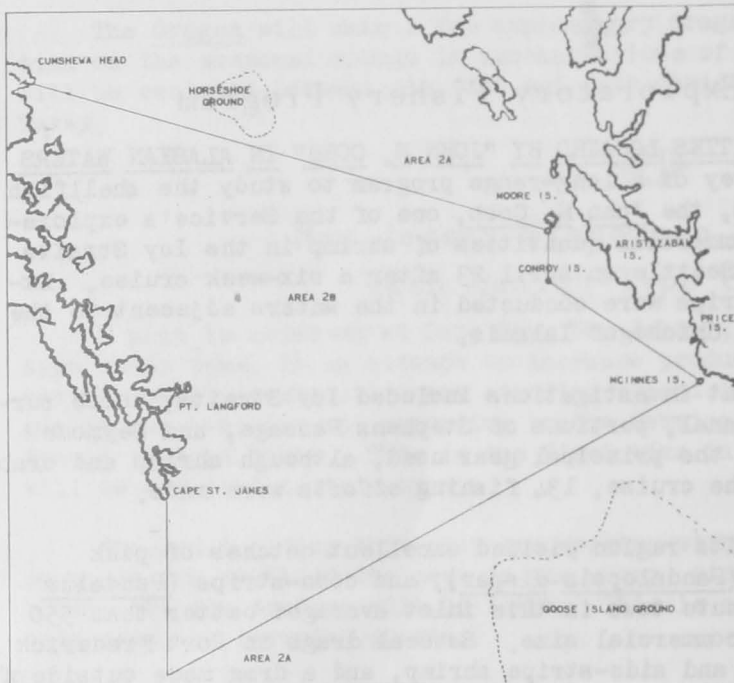


FIGURE 1 - MAP INDICATES BOUNDARIES OF AREA 2B.

The 1951 regulations are similar to those of 1950 except in the following respects. Two small portions of Area 2 have been designated as separate areas, namely: Area 2B off the east coast of Moresby Island in lower Hecate Straits and Area 2C off the west coast of Dall Island in the Forrester Island region of southeastern Alaska. The remaining portion of old Area 2 is designated as Area 2A. Areas 2B and 2C are closed to halibut fishing during the regular fishing season and open for 10 days at midnight July 25, at the season when these sections formerly produced their best catches.

The purpose of this change is to increase the yield from these grounds. The present treaty allows only one fishing period in an area each year. The period allowed for the validation of licenses prior to the opening date in the different areas was reduced this year. A few minor changes have also been made to provide for conditions arising from the division of old Area 2.

The catch of salable dressed halibut to be taken during the halibut fishing season of the year 1951 from Area 2A will be approximately 25,500,000 pounds; from Area 3, 28,000,000 pounds; and from Area 4, 5,500,000 pounds. Catch is also limited to fish which with head on are 26 inches or more in length as measured from the tip of the lower jaw to the extreme end of the middle of the tail or to dressed fish which are 5 pounds or more in weight.

The Commission will determine as early as practicable the date on which it seems each catch limit will be attained, and the limit shall then be that which shall be taken prior to the established date. If it shall at any time become evident that the limit will not be reached by the closing date announced for any area, the Commission may substitute another date.

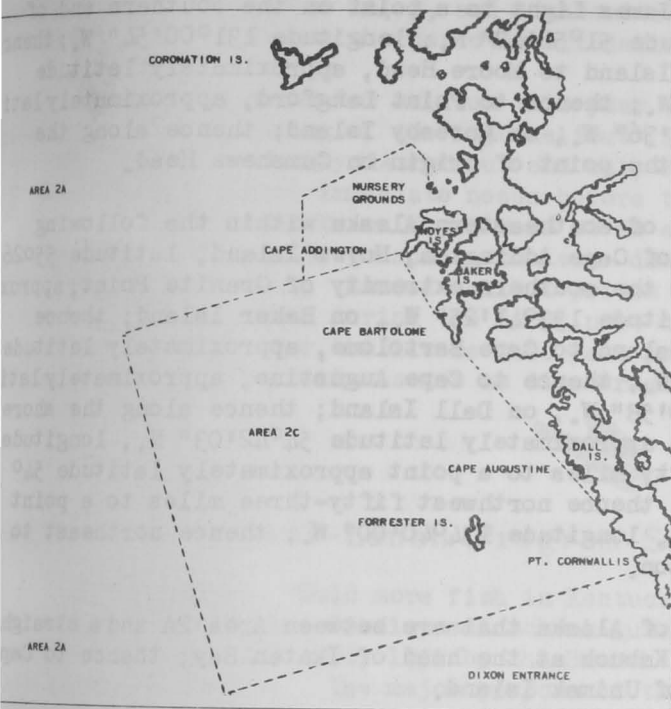


FIGURE 2 - MAP INDICATES BOUNDARIES OF AREA 2C.

earlier than the closing date of Area 3.

Under permit and in accordance with certain limitations, halibut caught incidentally to fishing for other fish can be retained after the halibut season is closed in any area. These permits will expire at midnight November 15, 1951, or at an earlier date if the Commission so determines.

The areas as defined in the 1951 regulations are:

Area 1A - Waters southeast of a line running northeast and southwest through Cape Blanco Light.

Area 1B - Waters between Area 1A and a line running northeast and southwest through Willapa Bay Light on Cape Shoalwater.

Area 2A - Waters off the coasts of the United States, Alaska, and Canada between Area 1B and a line running through the most westerly point of Glacier Bay, Alaska, to Cape Spencer Light, thence south one-quarter east and is exclusive of Area 2B and Area 2C and of the nursery areas closed to all halibut fishing as delineated in Section 9 of the regulations.

Area 2B - Waters in the southern part of Hecate Straits off the coast of British Columbia within the following boundary: from the eastern extremity of Cumshewa Head on Moresby Island, approximately latitude $53^{\circ}02'00''$ N., longitude $131^{\circ}36'20''$ W., to the northern extremity of the second largest island of the Moore Islands group, approximately latitude $52^{\circ}40'05''$ N., longitude $129^{\circ}25'32''$ W.; thence to the northern extremity of Conroy Island, approximately latitude $52^{\circ}32'05''$ N., longitude $129^{\circ}24'5''$ W.; thence to McInnes Island Light on McInnes Island, approximately latitude

The halibut season opened in Areas 1A, 1B, 2A, 3, and 4 on May 1 and will end on November 30 unless an earlier date is determined upon for any area, but in Areas 2B and 2C the season will begin on July 26 and end at midnight August 4.

Similar to previous years, the season ends in Areas 1B and 2A when the Area 2A catch limit is taken; and in Areas 1A and 3 when the Area 3 catch quota is filled. Area 4 will close at the same time as Area 3, unless it is closed earlier because the catch quota has been reached

51°15'45" N., longitude 128°43'22" W.; thence southwest by south approximately 99 miles to a point approximately latitude 51°28'55" N., longitude 131°00'56" W.; thence true north through Cape St. James Light to a point on the southern end of Kunghit Island, approximately latitude 51°56'42" N., longitude 131°00'54" W.; thence along the eastern shore of Kunghit Island to Moore Head, approximately latitude 52°09'02" N., longitude 131°03'00" W.; thence to Point Langford, approximately latitude 52°09'48" N., longitude 131°02'36" W., on Moresby Island; thence along the eastern shore of Moresby Island to the point of origin on Cumshewa Head.

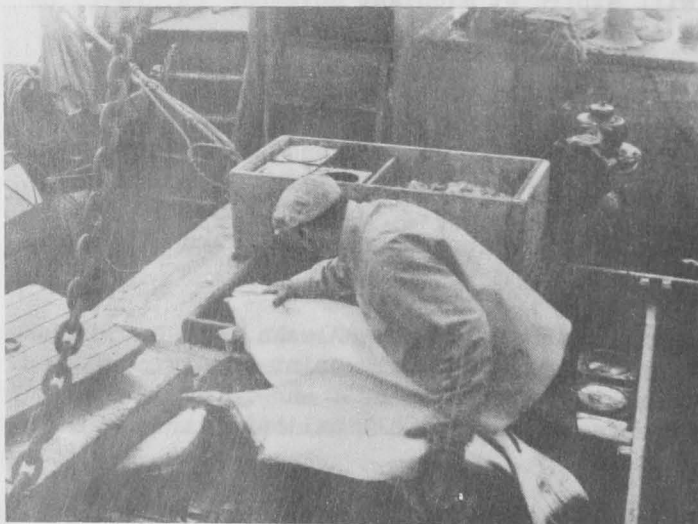
Area 2C - Waters off the coast of southeastern Alaska within the following boundary: from southern extremity of Cape Addington, Noyes Island, latitude 55°26'11" N., longitude 133°49'12" W., to the southern extremity of Granite Point, approximately latitude 55°18'57" N., longitude 133°41'25" W., on Baker Island; thence along the southern shore of Baker Island to Cape Bartolome, approximately latitude 55°14'13" N., longitude 133°36'42" W.; thence to Cape Augustine, approximately latitude 54°56'56" N., longitude 133°09'58" W., on Dall Island; thence along the shore of Dall Island to Point Cornwallis, approximately latitude 54°42'03" N., longitude 132°52'30" W.; thence southwest fifty miles to a point approximately latitude 54°27'20" N., longitude 132°14'10" W.; thence northwest fifty-three miles to a point approximately latitude 55°17'43" N., longitude 134°40'00" W.; thence northeast to the point of origin on Cape Addington.

Area 3 - Waters off the coast of Alaska that are between Area 2A and a straight line running from the light on Cape Kabuch at the head of Ikatan Bay; thence to Cape Sarichef Light at the western end of Unimak Island.

Area 4 - Waters in Bering Sea which are not included in Area 3.

* * * * *

AREAS 2A AND 1B OPEN SEASON SHORTEST ON RECORD: The open season for halibut fishing in Areas 2A and 1B this year was the shortest on record. The International Fisheries Commission announced on May 16, 1951, that these two areas would be closed at midnight May 28, 1951, to all halibut fishing, except that provided for in Section 5 of the 1951 Pacific Halibut Regulations and Article I of the Convention. By that date the Commission estimated that the quota of 25,500,000 pounds for Area 2A (waters between Willapa Harbor and Cape Spencer, Alaska, not contained in the new Areas 2B and 2C) would be filled. No quota was established for Area 1B (between Cape Blanco to Willapa Harbor), but this area would be closed with Area 2A.



FISHERMAN STORING DRESSED HALIBUT IN ICE IN THE HOLD OF A PACIFIC COAST HALIBUT SCHOONER.

Areas 2A and 1B would be only 28 days long, compared with 32 days in 1950, 34 days in 1949, 32 days in 1948, 39 days in 1947, and 42 days in 1946.

No closing dates have been announced as yet for other areas.

The Pacific Coast halibut season for all areas in 1950 was 66 days long, compared with 73 days in 1949, 72 days in 1948, and 109 days in 1947. Last year the halibut season in Areas 1A, 3, and 4 closed at midnight July 5, 1950. Indications to date point to even a shorter over-all halibut fishing season for this year.

Market conditions for halibut this year are actually not as strong as last year. At the beginning of the 1950 halibut fishing season cold-storage stocks of halibut were practically cleaned out and only enough stocks remained in the freezers to take care of local immediate needs before the new halibut entered the markets. This year halibut stocks on May 1 were at an all-time high--about 6,548,000 pounds, compared with 1,344,587 pounds on the same date in 1950, and 1,553,994 pounds on the same date in 1949. Landed halibut prices at the beginning of this season were appreciably lower than during the first part of May in 1950. However, prices fishermen will receive for the livers this year probably will be somewhat higher since the outlook in liver oils is not as discouraging as it was a year earlier.



Service's School-Lunch Program Sells More Fish in Kentucky

Introduction: "Sold more fish in Kentucky"--this sums up the results of the Educational and Market Development school-lunch program conducted in Kentucky during the fall of 1950 and early 1951 by the Branch of Commercial Fisheries, U. S. Fish and Wildlife Service. The major purpose of the program was to increase the use of fish in Kentucky schools and institutions by actual demonstrations of proper fish cookery to groups of school and institutional cafeteria managers. In addition, radio stations and newspapers were enlisted to directly educate the housewives on the subject of fish and its uses.

The demonstrations were arranged with the cooperation of the Kentucky Department of Education, and the Production and Marketing Administration of the U. S. Department of Agriculture. Locations for these demonstrations were chosen so that as many representatives as possible of Kentucky schools and institutions would have an opportunity to attend. A total of 20 fish-cookery demonstrations were presented in the State at which 354 schools and institutions feeding nearly 100,000 persons were represented.

The demonstrations were conducted by a trained home economist of the Fish and Wildlife Service, using tested recipes designed especially for meals in schools and institutions. Frozen and canned fish were used since both were found to be generally available and at a price that the schools and institutions could afford.

Method of Determining Success of Demonstrations: To determine the success of these demonstrations, a survey was made in 98 schools in various sections of Kentucky. These schools were selected at random as being representative of all the schools whose personnel attended the demonstrations. By checking their menus, purchase invoices, and by direct interviewing of their school-lunch personnel, it was possible to obtain information as to the frequency of use and quantity of fishery products used in a period before and after the demonstrations.^{1/} As a control, there were selected at random 22 schools that had not been represented at the fish-cookery demonstrations. The use of fish in these schools during the same period before and after the demonstrations was obtained in the same manner as in those schools represented at the demonstrations.

^{1/}JANUARY AND FEBRUARY 1950 WERE PICKED FOR THE PREDEMONSTRATION PERIOD, AND JANUARY AND FEBRUARY 1951 FOR THE POSTDEMONSTRATION PERIOD.

Results of Demonstrations: In schools represented at the fish-cookery demonstrations, it was found that fishery products appeared on their menus 43 percent

Results of Kentucky School-Lunch Program Fish-Cookery Demonstrations

	Average times fish used per month per school			Percentage increase	Average pounds fish used per month per school			Percentage increase
	Jan. 1950	Feb. 1951	%		Jan. 1950	Feb. 1951	%	
Schools represented	2.1	3.0	43	81	111	38		
Schools not represented	2.0	2.2	10	55	65	18		

more frequently after the demonstrations than before. The number of times per month that fishery products were used before the demonstrations was found to be 2.1 times, whereas after the demonstrations this increased to 3.0 times per month. The increase on a poundage basis was also calculated.^{2/} It was found that the average school represented used 81 pounds of fishery products monthly before the demonstrations, compared to 111 pounds afterwards, or an increase of 38 percent. This slightly smaller percentage increase in pounds as compared to frequency indicated that the smaller schools gained slightly more from the demonstrations.



DEMONSTRATION AT LOUISVILLE, KENTUCKY. HOME ECONOMIST NANCY SHIPLEY OF THE U.S. FISH AND WILDLIFE SERVICE IS PREPARING A FISH LOAF.

In those schools not represented at any demonstration, it was found that an increase in fish consumption had also taken place, but at a smaller rate. These schools used fish 2.0 times per month in January and February 1950, and 2.2 times per month in the same period of 1951. Practically without exception these schools cited as the reason for their increased use of fishery products the fact that these were listed on the U. S. Department of Agriculture's abundant food list. (A list of abundant fishery products is supplied by the Service's Branch of Commercial Fisheries to the Department of Agriculture periodically.) In their efforts to economize during this period of rising prices, schools have apparently been paying close attention to the buying suggestions made by the U. S. Department of Agriculture. The survey in Kentucky indicated that the listing of abundant selected

fishery products on Agriculture's abundant food list had a definite beneficial effect.

^{2/} THE AVERAGE NUMBER OF LUNCHESES SERVED DAILY DURING THE PERIOD WAS MULTIPLIED BY THE STANDARD 2-OUNCE LUNCH PORTION AND THEN MULTIPLIED BY THE NUMBER OF TIMES THAT FISH WAS SERVED. THE RESULTING FIGURE IN OUNCES WAS THEN CONVERTED INTO POUNDS.

The net result of the demonstrations can only be considered as the percentage gain in the frequency with which fish was used in represented schools, less the percentage gain of the same factor in schools not represented. Thus, in represented schools a 33 percent net increase in the frequency with which fish was used resulted from the demonstrations. Such a gain can be of considerable benefit to fish dealers. In Louisville, Kentucky, for example, one large fish dealer stated that one demonstration there had resulted in his selling 800 pounds more fish per week. He was able to do this, despite competition, by actively following up the demonstration with sales work of his own, and thereby gaining a large part of the new business developed. Ordinarily the new demand is spread widely among the many different dealers. But this example shows not only what a demonstration accomplishes, but also that local dealers need to follow up a demonstration with their own salesmanship to derive the greatest individual benefit from the demonstrations. The value of the demonstrations to the fishing industry as a whole is shown conclusively by the results of the survey.

Oven-Fried Fillets A Leading Favorite: In checking the fish recipes used by the individual schools in Kentucky, it was found that the one for oven-fried fillets was the overwhelming favorite. Despite the fact that it has been in many cook books for years, most schools apparently had not been using it until they had seen it in one of the Service's school-lunch demonstrations. Because pan frying, grilling, or deep frying fish is often objectionable in schools on account of the resulting odor, amount of grease used, or difficulty of preparation, the use of fish thus had often been neglected. The oven-frying method overcomes these problems. In fact, it was found in Kentucky that mothers were asking their children to bring home the recipe for frying fish that the children liked so well at school.

Promotional Fishery Program for the Consumer: During the fishery educational and market development program conducted by the Service's Branch of Commercial Fisheries in Kentucky, an attempt was made to reach the housewives with educational material on the use of fish whenever possible.

Newspapers were furnished with material and news items on the school-lunch demonstrations and on the use of fish in general. Most notable of these was a one-third page story on the use of fish which appeared in the Louisville Courier-Journal. This paper circulates throughout Kentucky, and in addition has considerable coverage in southern Illinois and Indiana.

Radio time on various stations was also obtained in a number of cities. On these programs a representative of the Fish and Wildlife Service discussed, for fifteen minutes, the purchasing and use of fishery products. It is quite difficult to evaluate statistically the worth of such newspaper and radio work. Nevertheless in Madisonville, Kentucky, one dealer stated that white perch sales increased from virtually nothing to a substantial amount following mention of white perch on a radio program there by the Service's representative.

NOTE: THE GENERAL FISHERY PROGRAM OF EDUCATION AND MARKET DEVELOPMENT OF THE FISH AND WILDLIFE SERVICE IN THE STATE OF KENTUCKY IS SIMILAR TO THAT WHICH HAS BEEN CONDUCTED IN SEVERAL OTHER STATES. IN SOME OF THESE STATES MUCH GREATER GAINS HAVE BEEN OBTAINED IN THE USE OF FISHERY PRODUCTS IN SCHOOL-LUNCH PROGRAMS. (SEE COMMERCIAL FISHERIES REVIEW, APRIL 1951, PP. 32-6; SEPTEMBER 1950, PP. 23-6; JULY 1950, P. 17; APRIL 1950, PP. 49-51.) THESE RESULTS SHOW THE BENEFIT OF SUCH A PROGRAM TO THE FISHING INDUSTRY AND TO THE PEOPLE WHO PROFIT FROM THEIR INCREASED KNOWLEDGE OF HOW TO USE A COMPARATIVELY REASONABLY-PRICED PROTEIN FOOD. THESE RESULTS ALSO SHOW THE POTENTIAL POSSIBILITIES OF CONSUMER EDUCATION IN OTHER SECTIONS OF THE UNITED STATES. (ROBERT P. SEIFERT, FISHERY MARKETING SPECIALIST OF THE EDUCATIONAL AND MARKET DEVELOPMENT SECTION, BRANCH OF COMMERCIAL FISHERIES, U. S. FISH AND WILDLIFE SERVICE, DID THE FIELD WORK ON WHICH THIS REPORT IS BASED.)

U. S. Pack of Canned Alewives, 1950

The 1950 pack of canned alewives amounted to 69,568 standard cases, valued at \$316,993 to the canner (table 1)—a decline of nearly 38 percent in quantity and, more than 32 percent in value, compared with the previous year. The pack was the smallest since 1941 (table 2).

State	Quantity	Total Value	Avg. Price
	Std. Cases ^{1/}		Per Std. Case
Maryland ..	29,325	155,156	5.29
Virginia ..	40,243	161,837	4.02
Total ...	69,568	316,993	4.56

^{1/}"STANDARD CASES" REPRESENT CASES OF VARIOUS SIZES CONVERTED TO THE EQUIVALENT OF 48 CANS (15 OUNCES EACH) PER CASE.

Cannery received an average of \$4.56 per case for the 1950 pack, compared with \$4.19 in 1949, \$5.19 in 1948, \$5.57 in 1947, and \$6.08 in 1946.

Practically the entire pack was canned in 15-ounce cans. Alewives were canned in 3 plants in Maryland and 9 plants in Virginia.

Year	Quantity	Pounds	Total Value	Avg. Price Per Std. Case
	Std. Cases ^{1/}	Net Weight	\$	\$
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
1944	135,995	6,119,775	793,254	5.83
1943	112,472	5,061,240	619,213	5.51
1942	77,232	3,475,440	399,555	5.17
1941	42,156	1,897,020	153,269	3.64
1940	24,486	1,101,870	72,070	2.94

^{1/}REPRESENT CASES OF VARIOUS SIZES CONVERTED TO THE EQUIVALENT OF 48 CANS (15 OUNCES EACH) PER CASE.

U. S. Pack of Canned Shrimp, 1950

State	Quantity	Value
	Cases ^{1/}	
Mississippi	202,006	3,417,345
Louisiana	520,601	8,217,833
South Carolina, Georgia, and Alabama	63,644	1,138,168
Total	786,251	12,773,346

^{1/}"STANDARD CASES" REPRESENT THE VARIOUS-SIZED CASES CONVERTED TO THE EQUIVALENT OF 48 CANS OF 5 OUNCES OF SHRIMP MEAT.

The pack of canned shrimp for the United States in 1950 amounted to 786,251 standard cases (48 5-ounce cans), valued at \$12,773,346 to the packers—an increase of 121,530 cases, compared with the previous year. This was the largest pack since 1942. The 1950 pack, however, was only 55 percent as great as the record 1937 production of 1,434,894 cases.

Slightly more than 66 percent of the 1950 pack was canned in Louisiana, while Mississippi canners accounted for nearly 26 percent of the production. Shrimp were

Table 2 - Pack of Canned Shrimp by Size of Can, 1950

Size	Quantity	Value	Packers' Price
	Actual Cases	\$	\$ Per Case
4½ ounces net (24 cans)	128,345	1,080,583	8.42
4½ ounces net (48 cans)	6,897	141,966	20.58
5 ounces net (48 cans)	696,209	11,037,819	15.85
7 ounces net (48 cans)	9,405	249,549	26.53
Other sizes (standard cases)	12,913	263,429	20.40
Total	853,769	12,773,346	-

canned in 19 plants in Mississippi, 26 in Louisiana, 2 each in South Carolina and Alabama, and 1 in Georgia. The 1950 average annual packers' price per case was \$16.25, a 3.6 percent decline from the previous year's price of \$16.85 per case and 6.3 percent lower than the record price of \$17.34 in 1947. However, the 1950 price was still 16.6 percent higher than the \$13.94 realized in 1948.

Table 3 - Pack of Canned Shrimp, 1940-50 (Quantity and Value to the Canners)

Year	Quantity	Pounds	Value	Packers' Price
	Std. Cases ^{1/}	Net Weight	\$	\$ Per Std. Case
1950	786,251	11,793,765	12,773,346	16.25
1949	664,721	9,970,815	11,203,325	16.85
1948	558,870	8,383,050	7,791,313	13.94
1947	472,366	7,085,490	8,192,004	17.34
1946	522,130	7,831,950	8,428,735	16.14
1945	214,971	3,224,571	1,918,633	8.93
1944	561,649	8,424,738	4,854,799	8.64
1943	660,436	9,906,534	5,360,647	8.12
1942	963,352	14,450,274	7,347,330	7.63
1941	884,874	13,273,112	4,882,544	5.52
1940	1,116,249	16,743,737	4,318,325	3.87

^{1/}STANDARD CASES REPRESENT THE VARIOUS-SIZED CASES CONVERTED TO THE EQUIVALENT OF 48 5-OZ. CANS FOR BOTH WET AND DRY PACK.



Wholesale and Retail Prices

WHOLESALE PRICES, MARCH 1951: In spite of the seasonal increase in the production of fishery products during March, wholesale prices for most varieties rose. The wholesale index for edible fish and shellfish (fresh, frozen, and canned) for March was 112.1 percent of the 1947 average (see table 1)—0.4 percent higher than the previous month and 14.7 percent above March 1950, the Bureau of Labor Statistics of the Department of Labor reports. March demand was reported generally good for all types of fishery products, except for frozen halibut.

The substantial increases in fresh haddock and fresh-water fish prices reported from February to March are attributed to lighter landings of haddock at New England ports and a curtailment of production in the Great Lakes due to bad weather conditions. The ex-vessel price of large haddock rose 7.9 percent in March, but this increase was partially offset by a decline of 8.8 percent in the prices quoted for

frozen Western halibut and a slight drop in salmon prices. However, the drawn, dressed, or whole finfish subgroup index (of which these items are components) increased 1.2 percent from February to March this year and it was 5.2 percent higher than in March 1950.

The fresh processed fishery products subgroup index this March declined 0.5 percent as compared to February, but it was still 3.9 percent higher than in March

GROUP, SUBGROUP, AND ITEM SPECIFICATION	POINT OF PRICING	UNIT	AVERAGE PRICES (\$)			INDEXES (1947 = 100)		
			Mar. 1951	Feb. 1951	Mar. 1950	Mar. 1951	Feb. 1951	Mar. 1950
ALL FISH AND SHELLFISH (Fresh, Frozen, and Canned)						112.1	111.6	97.7
Fresh and Frozen Fishery Products:						108.3	107.4	103.8
Drawn, Dressed, or Whole Finfish:						118.2	116.8	112.4
Haddock, large, offshore, drawn, fresh	Boston	lb.	.11	.10	.10	114.1	105.7	108.6
Halibut, Western, 20/80 lbs., dressed, fresh or frozen	New York City	"	.35	.39	.34	103.2	113.1	99.2
Salmon, king, lge. & med., dressed, fresh or frozen	" " "	"	.53	.53	.48	128.9	129.9	117.1
Whitefish, mostly Lake Superior, drawn (dressed), fresh	Chicago	"	.60	.57	.60	172.0	164.0	172.7
Whitefish, mostly Lake Erie pound net, round, fresh	New York City	"	.67	.51	.63	150.9	114.4	142.4
Lake trout, domestic, mostly No. 1, drawn (dressed), fresh	Chicago	"	.60	.57	.62	131.2	125.2	136.4
Yellow pike, mostly Michigan (Lakes Michigan & Huron), round, fresh ..	New York City	"	.54	.53	.58	125.5	122.9	135.8
Processed, Fresh (Fish and Shellfish):						95.7	96.2	92.1
Fillet, haddock, small, skins on, 20-lb. tins	Boston	lb.	.35	.32	.33	126.2	115.9	119.5
Shrimp, lge. (26-30 count), headless, fresh or frozen	New York City	"	.57	.59	.63	82.4	84.4	91.2
Oysters, shucked, standards	Norfolk area	gal.	4.47	4.50	3.50	110.0	110.8	86.2
Processed, Frozen (Fish and Shellfish):						105.1	102.8	103.0
Fillet: Flounder (yellowtail), skinless, 10-lb. bxs. ..	Boston	lb.	.37	.35	.37	120.2	113.0	119.4
Haddock, small, 10-lb. cello-pack	"	"	.24	.24	.28	109.7	108.1	126.7
Ocean perch (rosefish), 10-lb. cello-pack	Gloucester	"	.29	.29	.21	145.0	145.0	103.1
Shrimp, lge. (26-30 count), 5-lb. bxs.	Chicago	"	.56	.54	.63	80.6	78.1	91.1
Canned Fishery Products:						118.0	118.1	88.6
Salmon, pink, No. 1 tail (16 oz.), 48 cans per case	Seattle	case	24.62	24.62	14.53	160.5	160.5	94.7
Tuna, light meat, solid pack, No. 1/2 tuna (7 oz.), 48 cans per case	Los Angeles	"	15.00	15.00	14.25	97.6	97.6	92.7
Sardines (pilchards), California, tomato pack, No. 1 oval (15 oz.), 48 cans per case	" "	"	6.75	6.75	5.50	75.5	75.5	61.5
Sardines, Maine, keyless oil, No. 1/4 drawn (3 1/2 oz.), 100 cans per case ..	New York City	"	6.44	6.47	7.75	63.1	63.4	76.0

1950. Prices for fresh haddock fillets during the month were 8.9 percent above those in February and 5.6 percent higher than in March a year earlier. Fresh headless shrimp prices also dropped in March and they were 9.6 percent below March 1950, due probably to heavier shipments of fresh shrimp to leading markets.

Although cold storage stocks continue ample, the March index for processed frozen fish and shellfish increased 2.2 percent over February this year and was 2.0 percent above March 1950. In this subgroup, the increases occurred mainly in frozen flounder fillets (cold storage holdings of which are comparatively low) and haddock fillets (in spite of large cold storage holdings). Frozen shrimp prices also rose in March this year. Compared with the corresponding month a year earlier, March prices for frozen haddock fillets and frozen shrimp continued substantially lower, while frozen ocean perch (rosefish) fillets prices were 40.6 percent higher.

Canned fishery products prices in March reversed their upward spiral and dropped slightly. The month's index for this subgroup was 0.1 percent higher than February, but 33.2 percent above March 1950. Prices of all canned products under

this subgroup during March remained steady at February levels except for Maine canned sardines which dropped slightly. However, compared with March 1950, prices this March were higher for pink salmon by 69.5 percent, for California sardines by 22.8 percent, and for tuna by 5.3 percent; but Maine sardine prices were 17.0 percent lower.

RETAIL PRICES, MARCH 1951: The retail prices of all foods increased less than 0.1 percent on the average between February 15 and March 15, 1951, a leveling off from the 1.85 percent increase of the previous monthly period. The retail food price index on March 15 was 226.2 percent of the adjusted 1935-39 base-period average, and 15.1 percent higher than the same period a year earlier (table 2).

Table 2 - Adjusted¹/Retail Price Indexes for Foods and Fishery Products, March 15, 1951, with Comparative Data

Item	Base	I N D E X E S		
		Mar. 15, 1951	Feb. 15, 1951	Mar. 15, 1950
All foods	1935-39 = 100	226.2	226.0	196.6
All fish and shellfish (fresh, frozen, & canned) ..	do	351.2	347.8	301.8
Fresh and frozen fish	1938-39 = 100	287.6	283.7	273.6
Canned salmon: pink	do	502.4	501.1	351.5

¹/INCLUDES ADJUSTMENTS TO IMPROVE THE CONSUMERS' PRICE INDEX AND TO MAKE IT A MORE ACCURATE MEASURE OF PRICE CHANGES IN THE MOBILIZATION PERIOD (SEE COMMERCIAL FISHERIES REVIEW, MAR. 1951, P. 21).

Fish and shellfish retail prices have followed the general price increase trend. The March 15 retail price index for all fish and shellfish (fresh, frozen, and canned) was 351.2 percent of the 1935-39 average, a rise of 1.0 percent over the mid-February average, and 16.4 percent above the same period of the previous year.

Prices of fresh and frozen fishery products at the retail level rose 1.4 percent from mid-February to mid-March this year, and on March 15 were 5.1 percent higher than on the same date of 1950.

The canned fish retail-price rate of increase slowed down considerably from mid-February to mid-March--there was only a slight gain (0.3 percent) during this period. However, the total increase since March 15, 1950, equals 42.9 percent. There are indications that canned fish prices will become relatively more stable in the future, and become more closely related to retail price changes for all foods.



ECA Procurement Authorizations for Fishery Products

Among the procurement and reimbursement authorizations announced by the Economic Cooperation Administration during April this year was \$280,000 to be used by Greece for the purchase of canned fish from the United States.

Procurement authorizations released by ECA for fishery products and byproducts for the period April 1, 1948, through April 30, 1951, totaled \$30,063,000 (\$17,374,000 for edible fishery products; \$11,149,000 for fish and whale oils; and \$1,540,000 for fish meal). The edible fishery products total consisted of \$14,522,000 for canned fish and \$2,852,000 for salted fish.



Economic Cooperation Administration Program Notes

GERMAN FEDERAL REPUBLIC GRANTED LICENSES FOR PEARL ESSENCE: Among a list of German dollar import licenses granted during February by ECA, were included several licenses for pearl essence and pearl paste. The dollar value is \$20,000. Although import licenses have been granted for this amount by the German Government, it should not be assumed that any or all of the pearl essence or pearl-essence paste will be actually imported by that Government, since not all licenses issued are utilized and deliveries may vary from original anticipated needs.

FURTHER AID TO BELGIUM SUSPENDED: The Economic Cooperation Administration on April 9 announced that it was suspending further aid to Belgium as a consequence of the action of the Belgian Government in supporting a private Belgian company in attaching \$7 million in Marshall Plan credits to Greece. Allotments to Belgium were suspended until there is a satisfactory adjustment. Belgium has been purchasing some canned fish under the ECA program.

ESTABLISHMENT OF A SPECIAL TECHNICAL AND ECONOMIC MISSION TO THE PHILIPPINES: The establishment of a Special Technical and Economic Mission to the Philippines was announced on April 6 by the Economic Cooperation Administration. This mission will work out with the Philippine Government the means for utilizing American grants and loans in the most effective manner for the stimulation and advancement of the economy of the Philippines. The sum of \$15 million has been earmarked for this purpose for the remainder of the present fiscal year. The Philippine aid program was recommended by a special economic survey mission which President Truman sent to the Philippines last summer at the request of Philippine President Elpidio Quirino to consider the economic and financial problems of the Philippine Republic and recommend measures that would enable the Philippines to become and remain self-supporting.

ECONOMIC AID TO THE COUNTRIES OF ASIA AND THE PACIFIC: The governments of Thailand, Indonesia, Burma, and the Associated States of Indo-China, trying to cope with momentous problems of self-support, self-government, and self-protection, accepted the United States offer of technical and economic aid a year ago, according to an April 6 ECA press release, and a number of aid programs to these countries have been launched during the past year. Included among the programs upon which emphasis is placed is one for the development of fisheries both for local consumption and export.

