

LOUISIANA SCHOOL-LUNCH PROGRAM USES MORE FISH

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BACKGROUND

Fishery products were used 48 percent more frequently by the school lunchrooms in Louisiana following an extensive program of fish-cookery demonstrations conducted by the U. S. Fish and Wildlife Service during the 1951/52 school year. This was one finding of a survey made by the Service to learn the value of its market development work with the schools of that State. These demonstrations were a part of the Service's efforts to stimulate the use of more fish in the National School Lunch Program. Similar work during the 1951/52 school year was carried on in New York, Pennsylvania, Florida, and other states.

The 52 demonstrations given in Louisiana (fig. 1) had an effect on the daily eating habits of over 260,000 elementary and high-school students. More than 2,500 lunchroom cooks and managers, representing 930 schools, attended the meetings. These schools have an aggregate enrollment of approximately 336,000 children. The program was planned so that an equal number of demonstrations could be held for colored and white school-lunch personnel. All of the meetings were conducted in cooperation with the Louisiana Department of Education's School Lunch Section and the U. S. Department of Agriculture's Production and Marketing Administration.

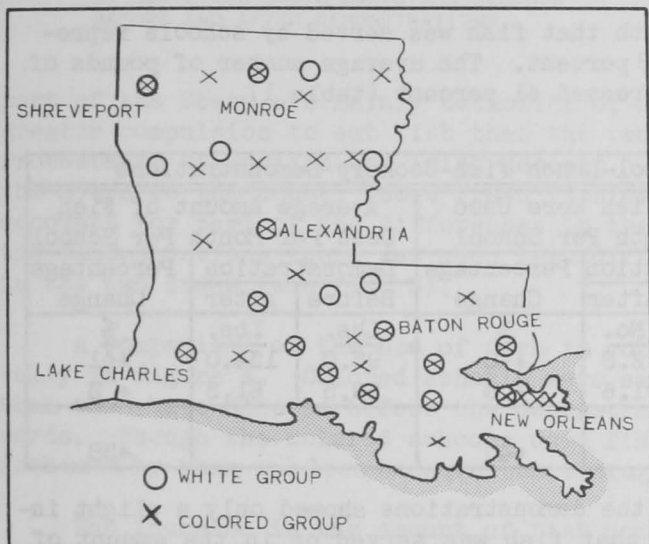


FIGURE 1 - RELATIVE LOCATIONS OF 52 DEMONSTRATIONS GIVEN IN LOUISIANA.

NATURE OF THE DEMONSTRATIONS

At each of these demonstrations a trained Home Economist of the U. S. Fish and Wildlife Service prepared six different fish recipes using canned and frozen fish. She also discussed

the purchasing, handling, and nutritive value of fishery products. Information on the local price ranges and availability of fish, obtained prior to the demonstrations through contacts with fish dealers and frozen food distributors in each area.

was given by a Service Fishery Marketing Specialist. A number of dealers and distributors came to the meetings and were available to informally answer specific questions regarding their operations. Fish recipes prepared especially for the school-lunch program were distributed to all who attended.



FIGURE 2 - SCHOOL LUNCHROOM PERSONNEL LEARNING ABOUT FISH COOKERY FROM U. S. FISH AND WILDLIFE SERVICE DEMONSTRATOR.

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METHOD OF DETERMINING THE VALUE OF THE DEMONSTRATIONS

The value of this program was determined by a post-demonstration survey covering 230 representative schools that attended the meetings. By examining menus, purchase invoices, and interviewing lunchroom personnel, it was possible to learn the number of times that fish was served per month before and after the demonstrations. February 1952 was selected as the check month for the northern and central Louisiana areas where demonstrations were given during the fall of 1951. April 15-May 15 was chosen as the period for checking the use of fish in the schools of southern Louisiana where demonstrations were given earlier in 1952. For both groups the use of fish for the same periods in 1951 were used for comparison.

A random sample of 100 schools not represented at any of the demonstrations was selected for use as a control. The records of these schools were examined in the same manner and for the same periods as those of the schools represented at demonstrations.

SURVEY FINDINGS

The average number of times per month that fish was served by schools represented at the demonstrations increased 48 percent. The average number of pounds of fish used per month by these schools increased 41 percent (table 1).

Item	Times Fish Were Used Per Month Per School			Average Amount of Fish Used Per Month Per School		
	Demonstration		Percentage Change	Demonstration		Percentage Change
	Before	After		Before	After	
For Schools:	<u>No.</u>	<u>No.</u>	<u>%</u>	<u>Lbs.</u>	<u>Lbs.</u>	<u>%</u>
Represented	1.9	2.8	+48	95.0	134.0	+41
Not represented	1.5	1.6	+ 8	59.5	61.3	+ 3
Net Gain for Represented Schools			+40			+38

The 100 schools not represented at the demonstrations showed only a slight increase in the number of times per month that fish was served or in the amount of fish used per month. The main factor responsible for this slight increase was found to be the listing of frozen fish fillets in the U. S. Department of Agriculture's monthly bulletin on abundant foods which is sent out to all schools.

The survey also revealed that schools in the northern part of the State had a much larger percentage increase in the use of fishery products than the schools of southern Louisiana (table 2).

Item	Times Fish Were Used Per Month Per School			Average Amount of Fish Used Per Month Per School		
	Demonstration		Percentage Change	Demonstration		Percentage Change
	Before	After		Before	After	
For Schools In:	<u>No.</u>	<u>No.</u>	<u>%</u>	<u>Lbs.</u>	<u>Lbs.</u>	<u>%</u>
Northern Louisiana	1.6	2.6	+63	64	109	+70
Southern Louisiana	2.0	2.8	+40	103	146	+42

NOTE: THE CENTRAL PARISHES OF PAIDES, VERNON, AND ALLEN WERE OMITTED IN ARRIVING AT THE FIGURES SHOWN IN THIS TABLE. THIS WAS DONE TO OBTAIN A BETTER COMPARISON BETWEEN THE NORTHERN AND SOUTHERN SECTIONS OF THE STATE.

Prior to the demonstrations considerably less fish had been used by northern Louisiana schools. This can be partially attributed to differences in the religious customs of the two geographic areas of the State. The people in the southern

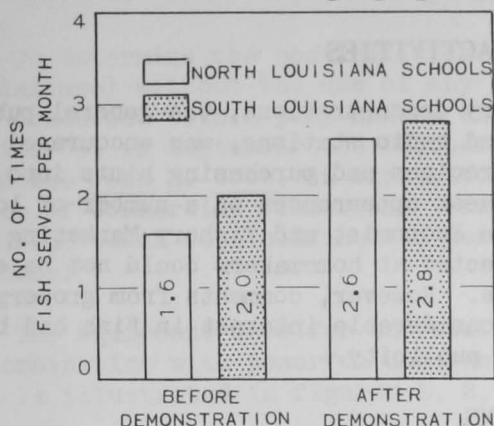


FIGURE 3 - COMPARISON IN USE OF FISH BY NORTH AND SOUTH LOUISIANA SCHOOLS BEFORE AND AFTER DEMONSTRATIONS.

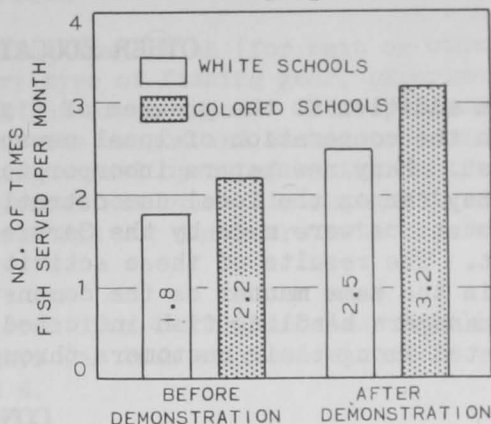


FIGURE 4 - COMPARISON IN USE OF FISH BY WHITE AND COLORED LOUISIANA SCHOOLS BEFORE AND AFTER DEMONSTRATIONS.

part of the State are mainly Catholics of French descent who have always felt a greater compulsion to eat fish than the people in northern Louisiana who are mostly Protestants of English and Irish descent. The proximity of the southern part of the State to the coast, where fresh fish are readily available, undoubtedly also accounts for part of the differences in the food habits of these two areas. After the demonstrations there was much less difference in the use of fish by the schools in the two areas (see fig. 3).

A comparison of the use of fish in colored and white schools is shown graphically in figure 4. Colored schools were serving fish 22 percent more frequently than the white schools before the demonstrations and 28 percent more often afterwards. Though the colored schools used fish more frequently, the average amount of fish used by them was less because the average colored school serves fewer hot lunches.

The increase in the amount of fish used by the Louisiana schools represented at demonstrations totaled to approximately 40,000 pounds of fish per month. At an average cost of 35 cents per pound, this represents additional fish purchases amounting to \$14,000 per month, or \$126,000 in the regular school year of nine months. The benefits of this increased buying was found to be widely spread among many dealers, with most dealers reporting some increases in their school business. One of the largest increases was reported by a Baton Rouge frozen-food distributor who said his fish sales increased from slightly over 5,000 pounds during the 1950/51 school year to over 50,000 pounds during the 1951/52 school year. This sizable increase was due to the firm's activity in following up the demonstrations with promotion of its own.

Personal interviews with the cooks and managers revealed that their greater knowledge of frozen fish had been a major factor in the increased use of fish which resulted. Though many had known very little about frozen fillets prior to the demonstrations, they had since made extensive use of the recipes demonstrated, especially the one for oven-fried fillets. However, the age-old superstition regarding the supposedly harmful effects of combining fish and milk was found to deter fish use in some areas even after the demonstrations. Principals and lunchroom managers complained that parents of many of the school children would not allow their children to eat fish and milk together. Generally, this problem was found only in the more rural areas of the State. Another problem in some rural areas concerned the difficulty which small schools had in obtaining frozen fish. In some cases of this kind,

the Service's Fishery Marketing Specialist was able to work out a solution to the problem, but the solution of future problems of this nature are a challenge to the fish dealers.

OTHER EDUCATIONAL ACTIVITIES

In addition to the program of fish-cookery demonstrations, the general public, through the cooperation of local newspapers and radio stations, was encouraged to use fish. Many newspapers incorporated fish recipes and purchasing hints into stories they ran on the local demonstrations. Guest appearances on a number of local radio stations were made by the Service's Home Economist and Fishery Marketing Specialist. The results of these activities directed at homemakers could not be evaluated in the same manner as the demonstrations. However, comments from grocery-store managers handling fish indicated that considerable interest in fish had been stimulated among their customers through this publicity.

CONCLUSIONS

The result of the surveys conducted in Louisiana following this program of fish-cookery demonstrations points out the educational value of actual demonstration techniques used in the preparation of fish. Lunchroom managers attending these demonstrations increased their use of fish by becoming better informed. Inland areas represent the greatest potential of untapped markets for fishery products. Through educational and sales efforts by fish dealers, fish consumption can be increased.



GULF FISHERIES, 1950

DO YOU KNOW THAT:

The 1950 United States catch of fish and shellfish in the Gulf of Mexico area amounted to 570,641,000 pounds, with an ex-vessel value of \$50,358,000--an increase of 7 percent in volume and 1 percent in value as compared with the landings of 1949. Menhaden (326,030,000 pounds) comprised 57 percent of the total landings; shrimp (151,753,000 pounds) accounted for 27 percent.

A total of 23,767 fishermen operated in the Gulf area during 1950, compared with 22,861 in 1949. The number of fishing vessels of 5 net tons and over rose to a new high of 2,704; in 1949 there were 2,244 craft operating.

--C.F.S. No. 817