REPORT SHOWS DETAILS OF FISHERY DEVELOPMENT PROGRAM

According to a report just issued by the Fish and Wildlife Service of the Department of the Interior, Saltonstall-Kennedy fund activities in behalf of American commercial fisheries during fiscal year 1957 included studies on many phases of fish production and utilization with special emphasis on:

- The restoration of the Alaska salmon fishery;
- New England fishery problems, especially those incident to the longer voyages the fishing fleets must make in search of the product;
- Derivatives of fish oils which may have industrial uses and might lead to the creation of new industrial products;
- Development of standards for quality of fishery products;
- Exploratory and research activities in behalf of the Maine sardine, California sardine, and Alaska herring industries;
- A search for a better source of seed oysters, better protection against oyster predators and better methods of handling oysters in the interim from the water to the customer;
- Explorations of the tuna resources and technological studies on the quality of the canned product;
- Exploratory and technological work on shrimp;
- Research on both the Atlantic Ocean and Gulf of Mexico races of menhaden;
- A program of gear development and improvement;
- Preservation of fish by radiation;
A broad program on marketing which includes education, market development and market information and such programs as fishery statistics and economic studies which apply to both production and utilization.

The Saltonstall-Kennedy program is carried out by the Bureau of Commercial Fisheries, United States Fish and Wildlife Service, either by Bureau personnel or on contracts awarded by the Bureau.

The allocation of funds for fiscal 1957 amounted to $6,595,000, some of it on projects which would extend over a period of at least three years. Of this total allocation, $3,394,000 was directed toward fishery biological research, $2,814,000 toward the exploration, development and utilization of the resource, and $387,000 for administrative expenses.

Biological research funds were distributed as follows: coastal and offshore research $2,073,000; tuna research, $640,000; shell fisheries, $251,000; Pacific oceanic research, $227,800; and inland commercial fisheries, $195,000.

Exploration, development and utilization of the resource funds were apportioned as follows: fishery technological studies, $845,700; exploratory fishing and gear research $757,300; commercial fishery statistics, $250,500; economic studies, $242,000; market news activities, $101,000.

Alaska's fishery, which includes salmon, halibut, herring, king crab and other species, is the Territory's most important industry. Available data indicates that its fishery products in 1956 were valued at $110,000,000 while its forest products for that year were valued at $34,000,000 and its mineral products at $25,000,000. But despite this, the full potential of its fishery is not being realized. Salmon is by far the most important species of fish caught in Alaskan waters and salmon production is far below what it was 20 years ago.

In 1955 the pack of Alaska salmon was 2,300,000 standard cases compared with an annual output of five and six million cases in the 1920's and 1930's. Since Alaska contributes about 10 percent of the total amount of fish caught by American fishermen and about 25 percent of the canned fish produced by American processors, the restoration of the salmon resource is of importance not only to the people of Alaska but to the American consumer.

A total of $786,500 was devoted to the many problems which beset the fishery there. Most of this went into salmon research as part of the long-time project of learning just why the salmon resource has dwindled, and to develop ways and means of bringing it back. In addition to this another $90,000 was allocated to the major salmon study which is being made under the direction of the International North Pacific Fisheries Commission.

The restoration problem is not merely one of allowing an adequate total amount of escapement from the fishermen's nets or lines, for many streams have continued to decline with more than 50 percent escapement. Salmon have a remarkable homing instinct and to realize the full potential of the spawning grounds there must be adequate escapement for each of the many thousand streams.
The Alaska fishery studies include salmon migration research, effects of predators on salmon stocks, effect of logging upon salmon potentials, development of better methods of counting and recording escapement; analysis of data already accumulated. Herring studies include identification of populations and development of predicting abundance. There is also the question of whether or not herring are indispensable to the stocks of coho and king salmon.

Special research is being done on the king crab which is one of Alaska's choice contributions to the American table. The problem with shrimp, clam, bottom fish, sea scallop and other potential fisheries in Alaska is that of development. With proper data available fishermen could utilize these resources to make the Alaska fishery more valuable and more stable.

The fact that New Englanders must travel greater distances than formerly and spend more time going to and from fishing grounds has created problems. In seeking solutions the Bureau of Commercial Fisheries has conducted explorations to locate new fishery resources, made freezer-ship economic studies and developed freezer-ship plans to combat time and distance difficulties, tackled the harassing problem of vessel and personal injury insurance costs which take 15 percent of the fisherman's dollar; and conducted numerous biological studies on various species of North Atlantic fish.

For North Atlantic explorations $311,000 was allocated. The work included investigations with conventional otter trawls and experimental midwater gear in an area extending from the Gulf of Maine to Georges Bank to a depth of 400 fathoms-- discovery of concentrations of commercial-sized scallops off Browns and Georges Banks--discovery of schools of bluefin tuna on the New England continental shelf-- significant catches of albacore, bluefin and yellowfin tuna in Gulfstream waters from Georges Banks to near Bermuda--herring explorations and gear development programs.

To secure the biological data on North Atlantic trawl fishes--sea scallops, flounder, whiting, ocean perch-- the sum of $439,000 was allotted.

Contracts were awarded for comprehensive studies of hull insurance problems and another contract was awarded for the best possible safety program which would prevent injury to the men and at the same time relieve the vessel owner of some of their insurance expense.

Sardine studies were made in widely separated areas. In the New England area there was $77,000 allotted for exploratory work on the herring of that region; for the study of the California herring $118,700 was provided, and for biological research on the Alaska herring there was $83,900 (already included in Alaska totals).

There was considerable activity on tuna in addition to the work done in the North Atlantic. For a three-year research program in the Pacific Ocean which will be conducted by contract, $640,000 was earmarked. Another $60,000 went to contracts to study how to improve methods of freezing skipjack at sea and on improving the quality of canned tuna. In addition, $227,300 was directed to Pacific Ocean studies which include research on the location of albacore stocks north of Hawaii and additional research on albacore.
There were various studies relating to shellfish. Exploratory work was done on New England sea scallops. There were promising catches of shrimp made in several areas near the Dry Tortugas Islands. Explorations for shrimp are continuing along the continental shelf from Cape Hatteras to Cape Canaveral. Other exploration is being done in deep water in the Gulf of Mexico. Biological studies on shrimp are aimed at answering many complex questions on spawning seasons, spawning areas, growth rates, distribution and behavior. This type of information must be available before any valid conservation practices can be inaugurated. For the shrimp biological work there was $130,000; for the exploratory activity, $116,000.

The studies on oysters were many and varied, including such items as why the southern oysters lose liquid, what is the optimum salinity for the development of eggs in the Long Island Sound area, what are the best methods for control of predators and how can the industry give the consumer the best possible oyster product. In addition the king crab and blue crab come in for study.

Saltonstall-Kennedy funds also aided in the continuing process of developing standards for quality fishery products. Fish stick standards have been operating for more than a year and during fiscal 1957 the first notice of proposed quality standards for frozen, raw, breaded shrimp was published. Considerable headway was made in the development of standards for frozen fish blocks and frozen fish portions, fried or raw; background data were collected on "groom" shrimp, blue crab and fish fillets for use in standards. There was $277,500 provided for this. Another $208,000 was provided for various studies, including complex chemical research, on new uses of fish oil and the components of fish oil.

There were numerous economic studies. A survey of public eating places showing the number which did not serve fish or shellfish pointed out a problem area to the industry. A national shrimp survey gave the shrimp industry pertinent facts on its production and distribution program. Other studies pertained to potential inland markets, household preference in fish products, parity prices and income in the fishing industry, marketing margins, the relative position of the fishing industry in the domestic economy and the demand and price structure.

Market development and educational activities included: Development of markets for under-utilized fish, test kitchen recipes and reports, promotion of the use of fish in the school lunch program, production and distribution of fishery educational motion pictures, promotion of fishery products through radio and television, special market studies, forecasts of fishery production and supply, and publication of various periodicals and reports.

The statistical program included national and regional compilations and publications.

The report, Research and Activities under the Saltonstall-Kennedy Act, Fiscal Year 1957, is available from the Division of Information, United States Fish and Wildlife Service, Department of the Interior, Washington 25, D. C.