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## THIS IS THE FISH FARMING EXPERIMENTAL J STATION

Stuttgart, Arkansas



DEPARTMENT OF THE INTERIOR

U.S. Fish and Wildlife Service Bureau of Sport Fisheries and Wildlife Circular 126 (C.



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The Fish Farming Experimental Station was established under Public Law 85-342 (1958). It authorized the Secretary of the Interior to establish an experiment station to study problem associated with the fish production of flooded land in rotation with rice and other field crops. Eighty-five acres of land adjacent to the University of Arkansas Rice Branch Experiment Station near Stuttgart and 211 acres adjoining the Southeast Branch Experiment Station, Kelso, Arkansas, were purchased.

Construction of the modern, functional laboratory and the service building



- ④ So. E. Branch Expt. Station
- 5 Bureau of Comm. Fish., Techn. Lab.

for shop, garage, and fish holding facilities was begun at the Stuttgart property in July, 1960. Work on the experimental ponds began in the Spring of 1961. The Kelso property will be developed later.

Professional staffing includes a team of research specialists in aquatic biology, microbiology and parasitology, physiology, biochemistry, and genetics. Supporting personnel provide secretarial services, laboratory assistance, fish handling, water management and station maintenance.

Research is concentrated on methods to improve the production of fish on. flooded rice land. Several groups of fish are studied for their adaptability reservoir conditions. These include Me catfishes, buffalo fishes, basses, and several promising imports. Field studies are to (1) determine the species of fish best suited for culture; (2) find methods for efficiently spawning fish and producing fingerlings for stocking purposes; (3) develop economical methods for raising desirable fish to a useful size; (4) develop controls for undesirable species of fish; (5) develop suitable methods for harvesting fish; (6) develop controls for aquatic weeds; and (7) determine,

in cooperation with the Department of Agriculture and the Rice Branch Experiment Station, the effects of fishrice rotations on soil fertility.

Areas of laboratory research include studies on (1) parasites and diseases affecting fish raised in reservoirs and the development of control measures; (2) the effect of environmental changes on the physiology of fish;



(3) the effects of agricultural chemicals on fish survival; (4) the nutritional requirements of fish; (5) improvement of strains of fish through selective breeding and mutation; and (6) improved techniques for spawning fish through the use of hormones and manipulation of the water quality. (





Research facilities are provided with both surface and ground water, and with air, gas, and electrical outlets. Office-laboratories for the research





staff are equipped with the latest in scientific equipment. A sound reference library concerning all phases of fish farming and related areas is rapidly accumulating.



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