LLANO RIVER

Report of Fisheries Investigations

Introduction of Smallmouth Black Bass, Micropterus dolomieu, in the Upper Regions of the Llano River lying within Sutton, Edwards, and Kimble Counties, Texas

by

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Dingell-Johnson Project F-9-R-7, Job F-1
July 1, 1959 - June 30, 1960

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A B S T R A C T

Quarterly efforts to collect smallmouth bass from the South Llano River were not successful. An additional 67 fingerlings raised on the San Marcos Hatchery were stocked at one location on the Howell Wright Ranch. The summer water temperature of the river was in the mid-80's.

An additional spawn was obtained from the Tishomingo stock at the San Marcos Hatchery. They are being kept until fall before they are placed in the river.

This is a continuation of Project F-9-R-6, Job F-1, but in the future it will continue under Project F-9-R, Jobs B-22 and S-1.

Job Completion Report

State of TEXAS

Project No. F-9-R-7 Name: Fisheries Investigations and Surveys of the Waters of Region 7-B

Job No. F-1 Title: Introduction of Smallmouth Black Bass, Micropterus dolomieu, in the Upper Regions of the Llano River lying within Sutton, Edwards, and Kimble Counties, Texas

Period Covered: July 1, 1959 through June 30, 1960

OBJECTIVES

1. To experimentally introduce smallmouth black bass, Micropterus dolomieu, into the upper regions of the Llano River in an attempt to improve sport fishing by stocking suitable predator fish in stream areas where biological, chemical, and physical conditions are thought to be suitable.

2. To make periodic checks as to survival and growth of stocked fish.

TECHNIQUES

Quarterly trips were made to the South Llano in an effort to recover some of the stocked smallmouth black bass. Sports fishing tackle was used in areas that the smallmouth would most likely frequent. Limited efforts to seine these bass were made also. The seine used was a bag seine (4- by 26-feet).

Water temperatures were taken at random points during the summer months, the only time that temperature would be a factor.

FINDINGS

All efforts to recover some of the stocked smallmouth failed. It can not be said with certainty that the experiment has failed, but the original stocking has not provided any added fishing. The possibility of the progeny providing a significant fishery is the only hope at this time.

The U. S. Fish and Wildlife Service has offered to provide additional smallmouth fry, however, they have had little success in the rearing of fry for restocking purposes.

The fry that were hatched on the San Marcos State Hatchery during the last segment were placed in one suitable location in the South Llano at the Howell Wright Ranch. There were 67 individuals approximately six inches in length.

The summer water temperatures of the stream ranged from 80° F. to 85° F. These checks were made in mid-stream at the several highway crossings. Spring areas maintained a temperature of 72° ± 1° F.

Another spawn was obtained from those originally brought from Tishomingo, and kept on the San Marcos Hatchery. The fry were seined from the brood pond and placed in a one-acre pond. At the present time they are approximately five inches long.

They are being fed golden shiner minnows (Notemigonus crysoleucas) weekly in an effort to prevent the cannibalism that severely reduced the number raised last year. It appears that several hundred six-inch fingerlings should be available to place in the South Llano this fall (1960).

The posters illustrating the smallmouth and other endemic bass were not made up at this time because it was felt that they would cause more confusion than help.

DISCUSSION

In the future, efforts should be made to obtain larger numbers of smallmouth fingerlings from the federal hatcheries. The failure of this job could be attributed to two factors. First, the marginal ecology of the stream for smallmouth, that includes physical factors and competition of endemic species, and second, the failure to acquire adequate numbers to perpetuate the species. The latter factor could be eliminated if larger numbers could be obtained for stocking.

This is a continuation of Project F-9-R-6, Job F-1, however in the future it will be handled under F-9-R Jobs B-22 and S-1.

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Project Leader

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