

## STUDY PERFORMANCE REPORT

State: Michigan

Project No.: F-80-R-2

Study No.: 692

Title: Influence of total length and condition at stocking on chinook salmon survival and time at large.

Period Covered: October 1, 2000 to September 30, 2001

**Study Objectives:** There are seven main objectives identified for this project. 1) To evaluate the influence of the total length of stocked chinook salmon on post-stocking survival. 2) To evaluate the influence of total length of chinook salmon at stocking on the age and size of fish returning to spawn. 3) To evaluate the cost per return of small versus large stocked chinook salmon. 4) To evaluate the influence of condition on survival of chinook salmon stocked at the same size. 5) To evaluate the influences of high and low condition on the return size and age of chinook salmon stocked at similar sizes. 6) To determine the cost per return of chinook salmon at two condition levels.

**Summary:** Fish for this study are to be stocked for three years beginning in 2001. The first year of stocking has been completed. The portion of the study evaluating the condition of chinook salmon at stocking was not initiated in 2001 due to delays in hatchery renovations at the Thompson hatchery and the need to work out appropriate rearing techniques to complete this objective. The recovery of tags will begin in the year 2002.

**Job 1. Title: Stock Fish.**

**Findings:** Study fish have been coded wire tagged and stocked into Lake Michigan and Huron tributaries as shown in Table 1 for the year 2001. Fish quality assessments have been conducted on each treatment prior to stocking and data are being compiled for future evaluation. The absolute number of fish stocked is still being compiled and will be reported in the 2001-02 report.

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Date: September 30 2001

Table 1.—Definition of experimental units, rearing locations and stocking sites for size-at-stocking evaluation. Fish will be stocked for three-years beginning in 2001.

	Swan River	Medusa Creek	Little Manistee River	St. Joseph River
Large (>90 mm)	100,000 (3yrs) Wolf Lake Hatchery	100,000 (3yrs) Wolf Lake Hatchery	100,000 (3yrs) Wolf Lake Hatchery	100,000 (3yrs) Wolf Lake Hatchery
Small (<75 mm)	100,000 (3yrs) Platte Hatchery	100,000 (3yrs) Platte Hatchery	100,000 (3yrs) Platte Hatchery	100,000 (3yrs) Platte Hatchery