

## STUDY FINAL REPORT

State: Michigan

Project No.: F-80-R-5

Study No.: 230469

Title: Investigations into causes of, and solutions for, recent declines in survival of trout stocked in Lake Huron

Period Covered: April 1, 1990 to September 30, 2004

**Study Objective:** (1) To explore methods of documenting the lacustrine early life history of stocked salmonids, with emphasis on understanding factors influencing mortality during their first year at large; (2) to determine whether there are genetically-based differences in early life-history characteristics that affect return to the creel, by comparing performance of a lacustrine strain of brown trout with that of one of the standard domesticated strains; and (3) to define methods that can be employed to improve survival and extend average longevity of brown trout used for stocking, such that return to the creel in lakes can be improved to 10% of the number stocked.

**Findings:** Only Job 8 was scheduled for 2003-04, and progress is reported below.

**Job 8. Title:** Publish report through the Fisheries Division's editing and finishing process for Research and Technical reports.—Results of this study have been published as:

Johnson, J. E., and Rakoczy, G. In press. Investigations into recent declines in survival of brown trout stocked in Lake Charlevoix and Thunder Bay, Lake Huron. Michigan Department of Natural Resources, Fisheries Research Report 2075, Ann Arbor.

Prepared by: James E. Johnson

Date: September 30, 2004