

## STUDY PERFORMANCE REPORT

State: Michigan

Project No.: F-81-R-7

Study No.: 230680

Title: Patterns in community structure, life histories, and ecological distributions of fishes in Michigan rivers

Period Covered: October 1, 2005 to September 30, 2006

**Study Objectives:** 1) To develop models that explain abundance patterns of the most common fishes in Lower Michigan streams; 2) to evaluate the role of landscape-scale characteristics of streams in favoring fishes having particular life history characteristics; 3) to develop an atlas describing the geographic and ecological distributions of fishes in Lower Michigan streams.

**Summary:** A report on relationships between species abundance and key habitat variables is in the publication process. Life history analyses have been delayed due to a temporary reassignment of my job duties.

**Findings:** Only Job 5 was scheduled for 2005-06, and progress is reported below.

**Job 5. Title: Write report.**—I submitted a final report describing patterns in abundances of common fishes in Lower Michigan streams for publication as a fisheries research report. It will be published in 2007 as “Relationships between habitat and fish density in Michigan streams” and submitted as a final report in December 2007.

Little progress has been made on analyses for Study Objective 2. I amended this study in 2006-07 to extend it an additional year because I was reassigned for the next 1.5 years to develop fish community based, decision models to support recently enacted groundwater protection legislation. Extending the final report deadline will allow me to work on this high priority task during the next year.

Prepared by: Troy G. Zorn

Date: September 30, 2006