STUDY PERFORMANCE REPORT

State: Michigan	Project No.: <u>F-80-R-7</u>
Study No.: 230669	Title: Prey selection and predation rate of piscivorous fish
Period Covered:	October 1, 2005 to September 30, 2006

Study Objective: To estimate survival of juvenile bluegills in ponds as a function of bluegill size and density, and predator size and density; and to concurrently measure predator survival and growth.

Summary: Only Job 6 was active this reporting period, to evaluate and prepare the final report. Additional evaluation of previous lab experiments was done, including the most recent lab experiment on growth in length and weight in relation to body size and feeding regime. A talk on this subject was presented at the Midwest Fish & Wildlife Conference in Grand Rapids, Michigan, in December 2005. The final report for this study will be submitted in December 2006 as planned to the Fisheries Division publication process.

Findings: Only Job 6 was scheduled for 2005-06, and progress is reported below.

Job 6. Title: Evaluate and prepare final report.—Evaluation of previous experiments continued. Based on this analysis, a talk was given at the Midwest Fish & Wildlife Conference in Grand Rapids, Michigan, in December 2005. The title of the talk was "Ration-dependent changes in relative weight of largemouth bass: experiments and models." The results of this study are intended to help understand the effects of prey size and density on predator growth and relative weight, and the consequences for survival of both predator and prey. The final report for this study will be submitted in December 2006 to the Fisheries Division publication process. This annual progress report was prepared.

Prepared by: <u>James E. Breck</u> **Date:** <u>September 30, 2006</u>