STUDY PERFORMANCE REPORT

State: Michigan **Project No.:** F-80-R-4

Study No.: 669 **Title:** Prey selection and predation rate of piscivorous fish

Period Covered: October 1, 2002 to September 30, 2003

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: According to the study as amended in 2000-01, Jobs 1, 3, 5, and 6 were active this year. Because of the recent retirement of the research pond technician and additional temporary changes in assignments and priorities, little additional progress was made on this study in 2002-2003. Some ponds were drained and stocked but the experiment was not conducted. Fish are being held in preparation for a pond experiment in summer 2004.

Findings: Jobs 1, 3, 5, and 6 were scheduled for 2002-03, and progress is reported below.

Job 1. Title: Stock ponds.–Several ponds were drained and fish moved. Two ponds were stocked with adult bluegill so that juvenile bluegill would be produced and available for experiments. Juvenile largemouth bass were stocked into a separate pond so they would be available for future experiments. Several additional ponds could not be stocked because of pending maintenance that would require pond draining.

Job 3. Title: Drain ponds.–Ponds were drained to stock adult bluegill and juvenile largemouth bass into separate ponds where fish could be reared and held. No experiments for this study were able to be conducted this reporting period.

Job 5. Title: Conduct strong test of predation model.–Because of the recent retirement of the research pond technician and additional temporary changes in assignments and priorities, the experiment to test the predation model was not conducted during this study reporting period.

We are holding juvenile walleye and reproducing populations of largemouth bass and bluegill at the Saline Fisheries Research Station. The current plan is to rear and hold fish in 2002-2003 so that predators and prey are available for experiments in summer 2004. With the additional reproduction that will take place next spring, there should be adequate numbers of fish to conduct experiments during the 2004 growing season.

Job 6. Title: Prepare annual progress report.–This annual performance report was prepared.

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