

STUDY PERFORMANCE REPORT

State: Michigan

Project No.: F-80-R-7

Study No.: 230722

Title: Implications of lakeshore development for fishery resources in Michigan

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

Study Objectives: Develop models integrating information from the literature and from new data collections to predict the response of fish populations and communities to lakeshore development.

Summary: Relatively little work has been accomplished on jobs for this study this year. The dearth of information available in the literature that is directly applicable to the modeling task has hampered my efforts greatly, and leads me to question whether defensible models could be built without field work designed to directly address key questions. Collaboration with Mary Bremigan and Kim Scribner has lead to work relating fish genetics and demographics, which is a component of the overall relationship between fish populations and their habitat.

Findings: Jobs 2, 4, and 5 were scheduled for 2005-06, and progress is reported below.

Job 2. Title: Develop initial modeling framework.—A conceptual model for largemouth bass in lakes was developed (Figure 1), forming the basis for modeling efforts, but has not been refined further.

Job 4. Title: Develop a field research agenda.—Based on the field research agenda developed in 2003-2004, I have continued to work with Mary Bremigan and Kim Scribner to develop a project addressing some of the critical data gaps identified. A research proposal for this project was submitted for consideration by the fisheries division's management team but was not funded. I have continued to seek a source of support for this project.

Job 5. Title: Prepare annual report and communicate program results.—This report was prepared as scheduled.

Prepared by: Daniel Hayes

Dated: September 30, 2006

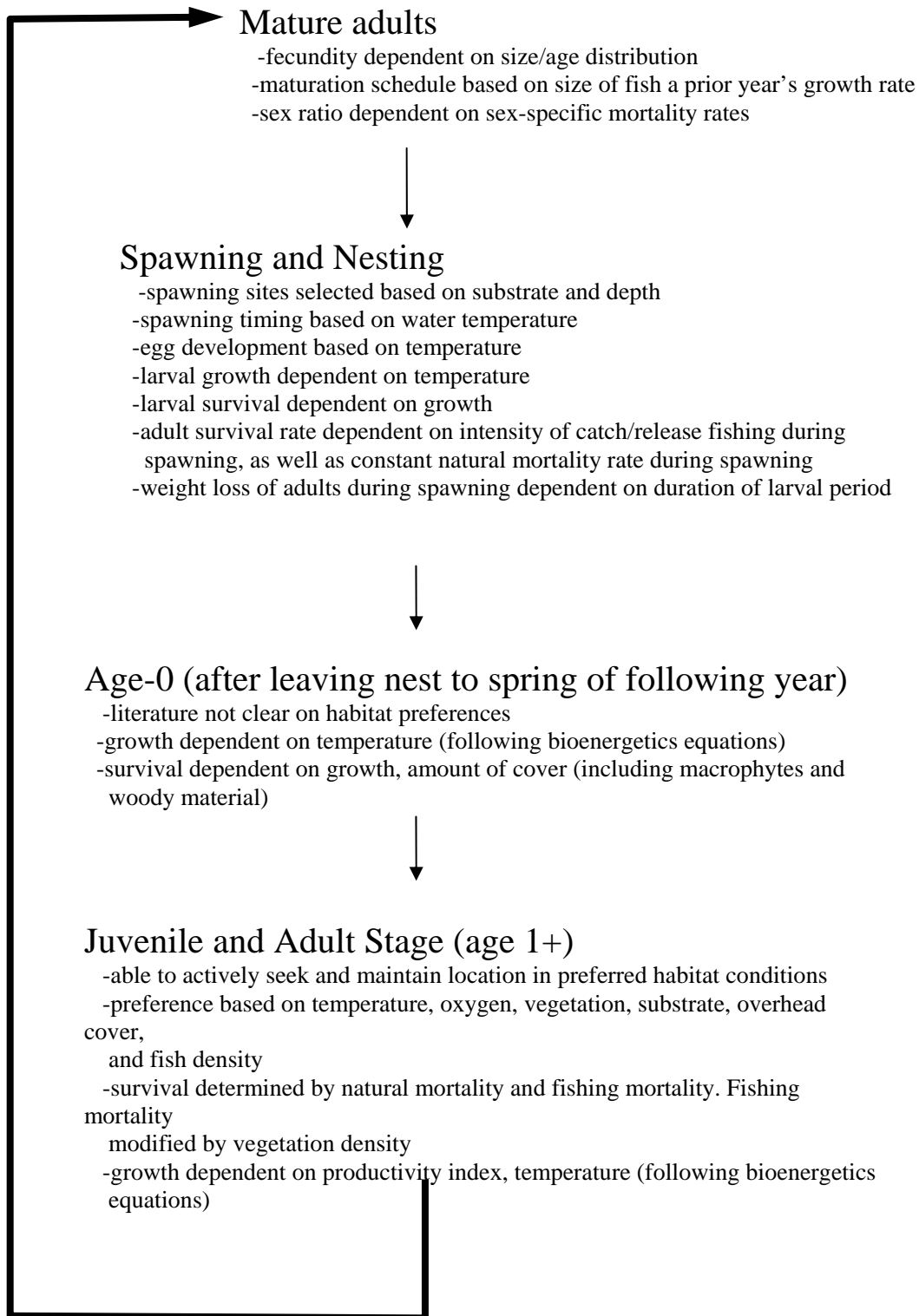


Figure 1.-Conceptual model of the relationship between largemouth bass population dynamics and lake habitat condition.