

## STUDY PERFORMANCE REPORT

State: Michigan

Project No.: F-81-R-6

Study No.: 230697

Title: Fisheries Stewardship and Heritage Outreach/Research (SHOR) Initiative: A Five Year Plan for Baseline and Longitudinal Research on Angling Involvement and Associated Fisheries and Aquatic Stewardship Activities in Michigan.

Period Covered: October 1, 2004 to September 30, 2005

**Study Objectives:** 1) Develop an annual, baseline reporting system to track demographic segments represented (and not represented) in the Michigan angling and fisheries stewardship populations, by using the computerized point-of-sale license database and other statewide databases. 2) Examine Michigan angler/stewardship population dynamics, including recruitment rates, retention rates, and other population parameters, using descriptive and analytical techniques commonly employed in basic fisheries population analysis and demography. 3) Design longitudinal research, using the computerized point-of-sale database, to examine the role of educational program interventions in early angling recruitment retention, and stewardship development, particularly among teenage, pre-license Michigan youth. 4) Evaluate effectiveness of other fisheries and aquatic stewardship communications/outreach tools and/or programs specifically designed for targeted audiences.

**Summary:** Throughout 2004-05, we continued our work with the angler license computerized point-of-sale license database to track trends in sales. We added our analysis of the 2004 license year data to our previous analysis of fishing license data from 1995-2003 to examine participation, recruitment and retention trends. Working with Roger Parsons, we again acquired the annual data from the statewide angler license computerized-point-of-sale database and sorted, analyzed, and graphed trends in angler recruitment and retention. In summary, our findings indicate a 14.1% decline in unique angling customers in the 10 license years since initiation of the RSS computerized point-of-sale license system in 1995. We have drafted and nearly finalized a baseline report describing angler recruitment and retention, parallel to the report issued in 2001 by the MDNR Wildlife Division describing hunting trends. We have identified parameters, such as license types, age, and gender in the annual fishing license sales database that will be used in future annual tracking reports to monitor angler recruitment and retention. In Fall 2004, we conducted a meeting/think tank to examine license trends with MDNR Fisheries Division staff, a former employee of the Ohio Department of Natural Resources who now works with SAS, and a representative who conducts evaluation and research for the Recreational Boating and Fishing Foundation. Throughout 2004-05, we worked with RBFF to examine longitudinal research strategies suitable for Southeast Michigan. Finally, we drafted a longitudinal research strategy using the database and other data sources to examine dynamics of long-term recruitment/retention and the role of educational program interventions.

**Findings:** Jobs 9, 11, 12, and 16 were scheduled for 2004-05, and progress is reported below.

**Job 9. Title: Prepare/update research proposals for Jobs 10-16.**—Work continued in 2004-05 with the Southeast Michigan Partnership for Fishing, Boating and Aquatic Stewardship, facilitated with the Recreational Boating and Fishing Foundation. We advised RBFF research staff on a longitudinal design and data analysis needed to examine the angling behavior of lapsed anglers

after these individuals received incentivized target mailings to renew their licenses for the 2005 year. In addition, we worked with RBFF and the Southeast Michigan Partnership to submit a proposal to RBFF for their consideration for continued (longitudinal) work in the 7-county Detroit metro area as the targeted study site for our work on this project. Work is underway to revise this proposal according to feedback from the partners group. Additional work will proceed on this job in fall 2005, until a final longitudinal education and research approach is decided upon for this SHOR Initiative.

**Job 11. Title: Initiate a longitudinal study to assess the role of educational intervention on angler recruitment, retention and stewardship, by selecting panels of study participants and re-contacting these subjects once during the project year.**—Study sites in Southeast Michigan, and in other locations have been identified through educational intervention areas where active Project FISH volunteers can contact study subjects in the target age (late teens, to early adulthood). Both qualitative and quantitative study designs to assess angling participation and lapsing behaviors will be used. (Contact of these study subjects has not yet occurred, due to the need to craft the Human Subjects protocol for the inclusion of minors as research subjects, and to gain approval from MSU's UCRIHS [human subjects] panel.) The number of study subjects will remain small (under 60) to allow for exploratory analysis and survey instrument design for a future larger-scale study. In addition, we will explore the opportunities which may exist in the research design that Dr. Frank Lupi is employing for an ongoing panel study of Michigan anglers.

**Job 12. Title: Summarize results.**—Working with Dr. Tammy Newcomb, Assistant Chief, MDNR Fisheries Division, we revised the draft final report for the angling license trend analysis portion of this initiative, after adding analysis from the 2004 license year. Now, our angling recruitment/retention trend analysis includes data from 10 full license years, from the inception of the RSS computerized point of sale license system (1995) through 2004. Data show a 14.1% total decline in unique angling customers over these 10 years of license sales. This draft report is written in a form suitable for publication in *Fisheries*, and a longer report (with detailed appendices regarding analysis techniques and results) is prepared in a form suitable for a Fisheries Division research report.

**Job 16. Title: Prepare Annual Performance Reports.**—This report was prepared.