

STUDY PERFORMANCE REPORT

State: Michigan

Project No.: F-81-R-4

Study No.: 489

Title: Comparison of mail and creel survey estimates for recreational fishing on the Great Lakes

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

Study Objective: To examine the feasibility of using a mail and/or telephone survey to provide estimates of effort, targeted effort, harvest, and targeted harvest by month and Statistical Reporting District for selected species from Michigan's waters of the Great Lakes.

Summary: This study examined on a pilot basis the feasibility of a mail survey for generating estimates of Great Lakes fishery effort and harvest. The mail survey generated estimates of fishery effort and harvest for comparison with a contact creel survey. Possible non-response bias and other factors associated with the mail survey led to substantial uncertainty associated with the results, which may explain some discrepancies with the contact creel survey. Estimating species-specific harvest appears problematic, likely due to species identification problems. While estimating fishery effort by mail survey has some potential, a number of issues related to using license databases and non-reporting need to be resolved. Since only about 25% of Michigan anglers fish the Great Lakes, it may be more efficient to jointly use mail surveys to evaluate inland and Great Lakes fisheries, with such surveys complementing rather than replacing contact creel surveys. Detailed results will be published in a research report.

Findings: Jobs 7 and 8 were scheduled for 2002-03, and progress is reported below.

Job 7. Title: Compare mail and creel survey estimates and evaluate results.—A database from the mail surveys was created, which required greater than expected editing. Data were analyzed to generate descriptive statistics of the angler population that was surveyed and to provide estimates of angler effort and harvest on Lake Michigan. Resulting estimates contain substantial uncertainties that could explain discrepancies between mail and creel surveys.

Job 8. Title: Prepare final report.—Detailed findings of this study are contained in a research report, which will be delivered to the Fishery Division Research Administrative staff for publication editing by December 31, 2003.

Prepared by: James Bence

Date: September 30, 2003