

STUDY PERFORMANCE REPORT

State: Michigan

Project No.: F-80-R-7

Study No.: 230515

Title: Evaluation of the relative growth and survival of Assinica, Nipigon, and Iron River-strain brook trout stocked into small inland lakes.

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

Study Objective: To determine the relative growth and survival of Assinica, Nipigon, and Iron River-strain brook trout stocked into small inland lakes.

Summary: Three strains of brook trout were sampled from research lakes and tagged to provide estimates of individual growth rates when they are later recaptured. Catch-per-unit-effort data indicate that the Iron River strain survived best while survival of the Nipigon strain was very low. Point estimates of mean length and weight suggest that the Assinica strain grew rapidly after planting while growth of the Nipigon strain was slow.

Findings: Jobs 1, 2, and 3 were scheduled for 2005-06, and progress is reported below.

Job 1. Title: Collect and tag brook trout.—I used electrofishing gear to collect brook trout from East Fish Lake and Fuller Pond during fall 2005 and spring 2006. Captured brook trout were tagged with VI Alpha tags manufactured by Northwest Marine Technology. Additional brook trout that attempted to emigrate from the lakes were captured in fish traps permanently installed on the outlets of the research lakes. These fish were tagged and released back into the lakes.

Job 2. Title: Estimate growth and survival.—The Iron River strain exhibited the highest survival based on the total number captured in the outlet traps and by electrofishing. A total of 209 Iron River, 143 Assinica, and 22 Nipigon-strain fish were collected. Survival of the Nipigon strain was very low based on numbers captured, to date. Assinica were longer and heavier than the other strains in all samples while Nipigon were smallest in all samples. More detailed information on growth rates will be presented in subsequent reports when sufficient numbers of tagged trout are recovered to allow estimation of individual growth rates.

Job 3. Title: Write annual performance report.—This performance report was completed as scheduled.

Prepared by: Andrew J. Nuhfer

Date: September 30, 2006