

QUANTIFYING ENVIRONMENTAL FACTORS AFFECTING THE ABUNDANCE AND DISTRIBUTION OF FISH POPULATIONS IN GEORGIA'S FORESTED ECOSYSTEMS

A McIntire-Stennis supported project



UNIVERSITY OF
GEORGIA

Warnell School of Forestry
& Natural Resources

Recreational fishing within Georgia's many forested lands is a multi million-dollar industry, consistently ranking as one of the most popular recreational activities undertaken in our state. Although the Georgia Department of Natural Resources annually devotes a significant portion of its resources to stocking waters on state lands, climate change and other anthropogenic disturbances threaten the sustainability of many economically important fish populations throughout or state. By providing sound biological assessment of both game and non-game fish populations on forested watersheds within these public waters, the study will greatly enhance fisheries management planning throughout forested lands in Georgia.



Because land use and management practices of forested watersheds within the state have a critical effect on water quality, seasonal flows, and spawning habitats for both game and non-game fishes throughout the State, a key component of this study will be to better understand how current and future forestry activities will likely affect the long-term viability of Georgia's fish populations. Within the context of global climate change, the linkages between forestry activities and water quality will become increasingly important for managing the states fisheries resources in future years.

About McIntire-Stennis

The McIntire-Stennis program, a unique federal-state partnership, cultivates and delivers forestry and natural resource innovations for a better future. By advancing research and education that increases the understanding of emerging challenges and fosters the development of relevant solutions, the McIntire-Stennis program has ensured healthy resilient forests and communities and an exceptional natural resources workforce since 1962.



COLLABORATION



The primary goal of this project will be to establish a collaborative research program with the GDNR, the US Forest Service, and the US Fish and Wildlife Service that will lead to the effective management of fish populations within Georgia.

IMPACT

This project will
(1) provide baseline data for monitoring future population trends of native fish populations and
(2) increase the efficiency of future management activities by helping to prioritize agency resources based on biological need.



Spawning stock estimates obtained from this project will help determine future management activities that can help restore imperiled fish populations



This study will help to gain an understanding on how changing uses of Georgia's forests may affect critical habitat for sturgeon throughout the state



The resulting database will provide a sound baseline for future management activities based on long-term population trends.