Position Title: Post-Doctoral Research Associate, Estimating Spatially-Explicit Mortality from Acoustic Telemetry Detection Data

Description: We seek a Post-Doctoral Research Associate with a strong background in statistics/modeling to develop and evaluate models for estimating spatially-specific mortality (fishing and natural) components from acoustic telemetry detection data. Project will involve simulation modeling and analysis of empirical data resulting from multiple acoustic tagging studies of walleye and other species in Lakes Erie and Huron. The hired associate will have an opportunity to work with a mixture of federal, state, and university biologists in model development. Developed methodology is anticipated to involve spatial capture-recapture or multi-state models implemented using a state-space framework. Developed models are anticipated to be used widely in the Great Lakes and other systems where observation systems are in place.

Hired Research Associate will be affiliated with both the Michigan State University Quantitative Fisheries Center (QFC) and Great Lakes Acoustic Telemetry Observation System (GLATOS). The QFC provides research, consulting, and educational services to state, provincial, and tribal fishery management agencies in the Great Lakes basin, and participates in collaborative projects involving statistical modeling, stock assessment, and structured decision making with numerous agencies, universities, and institutions in the region. QFC consists of 3 core fisheries faculty and numerous affiliate faculty. GLATOS is a bi-national network of researchers who collaboratively use acoustic telemetry to understand fish behavior in relation to Great Lakes ecology, and provide information useful to fish managers in their decision making. GLATOS researchers work collaboratively on Great Lakes telemetry projects and communicate their results to the scientific community, fishery managers, and the public.

Qualifications: Qualified candidates will have a PhD in fisheries or wildlife science, or related discipline with a strong record of research productivity. Experience analyzing capture-recapture or tagging data and state-space modeling is desired. Experience with programming in R, TMB, ADMB, and/or STAN is also desired.

Salary: $55,000/year + excellent benefits

Closing date: Until filled

Application instructions: All applicants must apply via careers.msu.edu, search posting #740591. Please submit your CV, letter of interest, names and contact information for 3 professional references, and transcripts (unofficial). Questions about the posting can be directed to Dr. Travis Brenden (brenden@msu.edu) or Dr. Chris Vandergoot (vandergo@msu.edu). Review of applications will begin in early November and continue until the position is filled, with the associate hopefully beginning in spring 2022. Hire individual may be able to begin the position remotely if necessary, because of the current pandemic. Please see https://msu.edu/together-we-will/ for the most up to date information about MSU policies.