Spatial ecology of coregonids in the Great Lakes

MS or PhD project

Anticipated start date: Summer 2018

Overview:

The U.S. Geological Survey New York Cooperative Fish and Wildlife Research Unit and the Cornell Biological Field Station at the Department of Natural Resources (CBFS), Cornell University invites applications for a funded studentship in Great Lakes fisheries ecology. The Cooperative Research Unit at Cornell represents a growing team of quantitative ecologists tackling natural resource management questions (www.coopunits.org/New_York/). The Department of Natural Resources has a long tradition of working with Great Lakes fisheries issues.

Lake Ontario coregonid restoration is advancing rapidly but deeper understanding about the contemporary ecology of these populations is needed to support Great Lakes monitoring and management efforts. This project will investigate the spatial ecology of coregonids in Lake Ontario, providing key information needed to design long term monitoring best practices for these native fish resources. Project questions will include acoustics assessments, species distribution dynamics, and early life history of Great Lakes coregonids. Work will include opportunities to partake in fish survey cruises on Great Lakes, and will utilize a range of statistical modeling techniques to address research questions about coregonid ecology.

The successful candidate will collaborate with a group of federal, state, and provincial biologists. Applicants with interests in or familiarity with acoustics are encouraged to apply; knowledge in statistical programming environments such as R, ADMB, WinBUGS/JAGS, Matlab or other relevant platforms is preferred. This studentship will be filled either as an M.S. or Ph.D. project, depending on the successful applicant.

Funding and application:

This project is funded for up to 3 years through a mix of support from the USGS Great Lakes Science Center, the US EPA, and teaching assistantships. Funding includes graduate stipend (≈34k USD/yr), health insurance, and tuition, pending annual budget availability.

The successful student will be advised by Dr. Suresh A. Sethi (Coop Unit, Cornell DNR), Dr. Lars Rudstam (CBFS, Cornell DNR), and Dr Brian Weidel (Lake Ontario Biological Station, USGS) and will be affiliated with the NY Cooperative Fish and Wildlife Research Unit and CBFS-DNR. To inquire, please submit a letter of interest, resume, and writing sample to: Dr. Suresh Andrew Sethi, suresh.sethi@cornell.edu. Indicate which degree you seek (MS or PhD). Finalists will be invited to apply to the Cornell graduate school for matriculation in Summer/Fall 2018. First review of application: **January 8, 2018.** Thanks for your interest!

December 2017