Silkeborg, Denmark: PhD, freshwater fisheries and ecology

A PhD Scholarship in Freshwater fisheries and ecology is available at the National Institute of Aquatic Resources (DTU Aqua) with starting date December 2014 or early 2015. The scholarship is partly financed by the Danish National Recreational Fisheries Program.

Closes: 7th November 2014

The project will primarily be carried out in affiliation to the Section for Freshwater fisheries and ecology which is situated in Silkeborg, Denmark. DTU Aqua is an institute at the Technical

University of Denmark.

The purpose of DTU Aqua is to provide research, advice and education at the highest international level within the sustainable exploitation of living marine and freshwater resources, the biology of aquatic organisms and the development of ecosystems as well as their integration in ecosystem-based management. The institute has an international research staff comprising approx. 120 academic employees.

Project description

Migration is a widespread strategy across a diverse array of taxa, and can have large ecological consequences. The migration patterns of diadromous fish has been coupled to different costs and benefits and is especially well studied in anadromous salmonids which likely benefit by being able to exploit the rich food resources in the sea, resulting in higher growth rate than if they had stayed in the freshwater habitat. The migration behaviour of salmonids is also relevant to consider in management decisions. For example when lakes are established as part of rivers, which can be the case when riverbeds are permanently flooded artificially in order to remove nutrients. In such situations where rivers pass directly through newly developed lakes, migratory species such as salmon and trout may be severely affected due to increased exposure to predation from predatory fish and birds which can increase from < 5% up to 60-85% for both trout and salmon.

This PhD should in particular focus on the causes behind this dramatic increase in mortality including how morphology of the newly established lake affects mortality. The study areas are [UTF-8?]EgĂL [UTF-8?]Engsø and [UTF-8?]Ă rslev [UTF-8?]Engsø, where several year time series data are available. Still, it will be needed to conduct further field work within the project to investigate specific topics both in relation to answering specific management questions as well as answering more broad ecological questions, i.e. relating to general aspects of migration biology and migration behavior.

Qualifications

We are looking for a candidate who has:

- Master of Science (M.Sc.) degree in Aquatic Science & Technology or similar.
- Previous experience in marine, aquatic or ecological research
- Proficiency in written and spoken English
- Some experience in planning and conducting field work
- Keen interest in research and for working within the field of marine and aquatic sciences
- Mathematical or modelling skills will be advantageous

Assessment

The assessment of the applicants will be made by Senior Research Scientist Anders Koed, DTU Aqua.

Salary and appointment terms

The salary and appointment terms are consistent with the current rules for PhD degree students at DTU.

The period of employment is 3 years.

Further information

For further information about the project, please contact Senior Research Scientist Anders Koed; ak@aqua.dtu.dk

General information may be obtained from Marian Solrun Probst, masad@aqua.dtu.dk (+45)

3588 3001

Application

You can read more about the position and have to apply on www.career.dtu.dk.