1 PhD student in the research education subject: Biology with orientation Ecology

Increasing biological knowledge for a better management of the Baltic Sea cod

The Swedish University of Agricultural Sciences, Dept. of Aquatic Resources (SLU Aqua), Institute of Marine Research, is looking for a highly motivated PhD-student to improve the knowledge on the biology and population dynamics of the Baltic Sea cod.

Cod is an important species for the Baltic Sea, both as a top predator in the ecosystem and as a source of income for fisheries. Cod management in the eastern Baltic Sea is currently hampered by the lack of a proper assessment of the status of the stock. This is caused by unreliable information of key biological parameters in combination with changes in environmental and ecological conditions. Key issues that prevent understanding the present status of the cod stock and providing adequate management advice is the lack of information on true age, growth rates and migration patterns. Hence, the project aims at solving these issues by increasing the biological knowledge of the Baltic Sea cod. Specifically, the objectives of the project are to (i) estimate the growth rates of cod through old tagging data and new tagging experiments; (ii) quantify the migrations of cod in the Baltic Sea seascape; (iii) apply the gained biological information in the evaluation of the Baltic cod stock status. These objectives will be achieved using field/laboratory work, different statistical analyses and stock assessment models. The results of the project will generate new knowledge on the biology of the Baltic Sea cod that will be used in fisheries and ecosystem-based management.

The PhD student will work in the Section "Stock assessment for an ecosystem-based management" at SLU Aqua in Lysekil with working and training periods abroad. SLU Aqua has extensive national and international collaborations. The PhD project will be associated to the international project "Tagging Baltic Sea cod", a collaboration of research groups from four different countries. The PhD position includes opportunity of exchanges within this large research network around the Baltic Sea, participation in offshore research surveys, and involvement in ICES stock assessment work.

Qualifications

The candidate should have a MSc degree or equivalent in Biology/Ecology/Environmental Sciences, or in Statistics/Mathematics with strong documented interest for biology. Particular merits are demonstrated knowledge in fish biology and population dynamics, as well as expertise in biological laboratory work with fish. Familiarity with sampling and analyses of fisheries data, fish stock assessment methods and fisheries management is also particularly desired. Experience with statistical evaluation of spatio-temporal biological and hydrological data, and familiarity to work with large datasets is desirable. Previous experience with fish tagging and/or analyses of tagging data is an asset. Demonstrated ability to publish in peer-reviewed journals is an advantage. Personal qualities such as dedication, high degree of self-motivation, creativity, initiative and independence as well as ability to collaborate with colleagues are considered essential. Excellent communication skills in spoken and written English are required.

Forms for funding or employment

Employment as PhD student

SLU is an Equal Opportunity Employer.

A person has basic eligibility for third cycle education if he or she has taken a second cycle qualification or has completed course requirements of at least 240 higher education credits, including at least 60 higher education credits at second cycle education. Upper secondary school grades equivalent to English B/English 6 are a basic requirement.

Selection among applicants meeting the requirements is made with reference to written application including curriculum vitae, copies of degrees and transcripts of academic records, one copy of the dissertation for masters or undergraduate degree, a list of at least two references familiar with the applicant's qualifications, certified knowledge of the English language and an interview.

Read about the PhD education at SLU at www.slu.se/en/phd

Use this APPLICATION FORM

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Applications, marked with ref no SLU ua 434/2016, must have arrived at the Registrar of SLU, P.O. Box 7070, SE-750 07 Uppsala or registrar@slu.se no later than 2016-03-28.