PhD position in modeling with interdisciplinary focus
Ref SLU.ua.2022.2.5.1-123

Department of Ecology at SLU
The PhD position is based at the Department of Ecology at the Swedish University of Agricultural Sciences (SLU), where we conduct research on populations, communities and ecosystems. We generate knowledge on how land use and climate affect animals, plants, nutrient cycling and greenhouse gas balance, seeking solutions to mitigate climate change, preserve threatened species, benefit biological diversity and ecosystem services in managed landscapes. Active outreach and frequent dialogue with stakeholders are key activities. To generate cutting-edge research and to promote sustainable natural resource management, we build on extensive national and international research collaborations.

Can laws save the natural world?
The PhD position takes place within VR-funded project 2020-04973 which proposes to combine law and conservation to help develop solutions to the biodiversity crisis. Most of the world’s nations have enacted environmental legal instruments to avert species extinctions. However, these legal instruments do not appear to be able to stop that crisis. Countries are consistently failing to meet agreed targets to reduce the loss of biodiversity. This failure raises the question of whether existing legal instruments, theories and methods are fit for the purpose of protecting species, populations and ecosystems and whether and how their effectiveness can be improved. The purpose of our research is therefore to develop a theoretical and applied understanding of the interplay between legal and ecological systems and document, analyze, model and improve our understanding of how law and conservation affect each other, with the goal of improving the ability of the law to conserve species.

Tasks:
We are looking for a highly motivated graduate student who will 1) develop quantitative models to translate legal concepts defined in European law into measurable ecological ones that are applicable across many taxa, 2) develop quantitative models to document the effects of legal protection on species recovery and 3) analyze patterns of biodiversity-related legal aspects across European countries. The research will involve several taxa, but with an emphasis on large carnivores. The PhD position is interdisciplinary, being both intensive in quantitative modelling and requiring an ability to understand legal concepts and their use by stakeholders.
Qualifications:
Master’s degree (or equivalent) with a specialization in quantitative analysis, either in ecology, social science, or complex system science, professional level fluency in English and a demonstrated ability to use computer programming languages for scientific analysis are required. Experiences or demonstrated interests with similar interdisciplinary questions on contemporary issues of global significance, scholarly publishing, knowledge of official languages of the European Union, statistical analysis in R and computer programming in C, C++ or Fortran are an advantage, as well as knowledge in Bayesian inference. Ability and experience to inform and communicate with diverse stakeholders such as authorities, governments or the European Commission is also a merit. Interpersonal skills will form an important part of the candidate selection.

Place of work: Grimsö, Sweden. With a possible agreement to spend time in Uppsala, Sweden.

Forms for funding or employment: Fixed-time employment (4 years), 100 %.

Starting date: By agreement.

Application: We welcome your application no later than April 1st, 2022. Use the link below, which is the official advertisement that prevails:

With the application should be attached (1) a statement of scientific interests and motivation for applying to this position (max 1500 words), (2) resume including a complete publication list if any, (3) copies of diplomas, (4) copy of the thesis equivalent to at least 15 ECT, (5) copy of a passport if the applicant is not a European citizen, (6) a list of at least two reference persons and their contact information, and (7) any written work the candidate believes is relevant for the position.

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.

Please observe that applicant/s called for an interview shall hand in certified copies of certificates, diplomas and transcripts from previous studies at an internationally recognized higher education institution (university or university college) and transcripts in connection to the interview. If the applicant is a foreign citizen we also require a certified copy of the page in a passport with personal data and photography.

Academic union representatives:
The Swedish University of Agricultural Sciences (SLU) is a world-class international university with research, education and environmental assessment within the sciences for sustainable life. Its principal sites are in Alnarp, Umeå and Uppsala, but activities are also conducted at research stations, experimental parks and educational establishments throughout Sweden. We bring together people who have different perspectives, but they all have one and the same goal: to create the best conditions for a sustainable, thriving and better world. SLU has just over 3,000 employees, 5,000 students and a turnover of SEK 3 billion. The university has invested heavily in a modern, attractive environment on its campuses. www.slu.se

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