

1 PhD student in the research education subject: Ecology, Forest Entomology

Diversity, Stability and Pest Population Ecology

We are seeking a PhD student to work in a project that connects basic ecological theory with applications for practical forestry.

Ecological systems are under stress from over-exploitation, pollution and climate change, thus a central question to current day ecology is how communities will be able to cope with stresses or adapt to new conditions. Ecological theory states the importance of species composition and diversity for community stability, buffering against disturbances and allowing for adaptability.

This PhD project will investigate the effect of tree diversity on higher trophic levels. The project will focus on the strength of bottom-up and top-down regulation of pest insects in relation to the diversity of tree and understory plant species in forest stands, using the European Pine Sawfly (*Neodiprion sertifer*) on pine (*Pinus sylvestris*) as a study system. We will utilize existing tree diversity experiments and conduct manipulative field studies.

An important role for ecological research is to provide knowledge that can be used in practical applications. The project will generate data about mechanisms affecting insect distribution and abundance. Eventually this information could be used in decision-making concerning future forest management methods to mitigate emerging risks.

The successful candidate will work in an active research group, providing potential for international collaboration as well as communication with stakeholders. The research environment at SLU, Uppsala provides an excellent environment for PhD students with Research Schools, a new concentrated campus and many fellow students.

Qualifications

Candidates should have a university degree in biology, ecology or forestry, preferably with specialization in community, population or insect ecology. Experience in design and field based execution of experiments is desired. Knowledge of statistical methods and their application is an extra merit. Proven excellence in written and spoken English is essential (either proof from Swedish gymnasium or TOEFL, IELTS or Cambridge ESOL). The fieldwork may take part in multiple field sites in Sweden, and a driver's license is therefore required. Within this project the candidate will work and participate in an active research environment, and should be capable and willing to take initiative and work independently as well as in a group. PhD-education aims to develop independent researchers, creative thinking, inquisitive minds and strong communication skills; this position will require all this along with an interest in pursuing a career in academia.

Forms for funding or employment

Employment as PhD student 4 years

SLU is an Equal Opportunity Employer.

A person has basic eligibility for third level education if he or she has taken a second level qualification or has completed course requirements of at least 240 higher education credits, including at least 60 higher education credits at second level.

Those who met the requirements for general eligibility before July 1st, 2007, i.e. had completed a programme of higher education for at least 180 Higher education credits or the equivalent, will continue to do so until the end of 2015."

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 more about the PhD education in [the Handbook for postgraduate students](#)

Read about the PhD education at SLU at www.slu.se/en/education/postgraduate-studies/

Use this [APPLICATION FORM](#)

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Applications, marked with **ref no Dnr SLU ua 5610/2013**, must have arrived at the Registrar of SLU, P.O. Box 7070, S- 750 07 Uppsala or registrator@slu.se no later than **2014-01-17**.