

1 PhD student in the research education subject: Biology or Forest Management

Interactive effects of fire and climate on tree seedling regeneration in boreal forests

A new Ph.D. studentship position is available with the Department of Forest Ecology and Management at the Swedish University of Agricultural Sciences, at Umeå, Sweden. It is a fully financed position (including salary and benefits) for a period of four years and will be linked to the Research School '*Forest Ecology and Management in a Changing Environment*' (<http://www.forest-ecology-management.se/home>).

Wildfire is the most important disturbance agent of many boreal forests, and fire has traditionally been used in forest management to improve regeneration after felling. Further, global climate change is predicted to increase the frequency and severity of wildfire as a result of warmer summer temperatures and prolonged periods of drought. However, despite the significance of fire in boreal forests, we understand relatively little about how fire (or post-fire recovery) effects interacts with either forest management or climate change. For this position, the research tasks involve characterizing the effects of fire severity and warming on tree regeneration and soil properties across forest stands in a region of mid Sweden that was severely burnt by a large wildfire during 2014, as well as the mechanisms involved. As such we expect this work will provide fundamental knowledge on the role of fire in boreal forests, and on how forest management can enhance regeneration and growth of desired tree species following fire under a changing global climate. This project would be ideal for students with an interest in forest ecology and management.

The start date for the position is April 1, 2017, although there is some flexibility around this.

Supervisors for this project will be: Prof. Marie-Charlotte Nilsson Hegethorn, Associate Prof. Michael Gundale and Prof. David Wardle

Qualifications

Applicants should have a Master degree or equivalent in Ecology or Forest Science. Practical experience in plant or fire ecology, soil science and/or forest regeneration will be viewed favorably. Personal qualities such as dedication and ability to collaborate are of high importance. Driver's license is required. The applicant is expected to provide a motivation letter, CV, certified copies of degree certificates, a certified copy of the passport if the applicant is a foreign citizen, and a list of at least two personal references and their full contact information. The applicant should have good communication skills and proven skills in both oral and written scientific English. Applications from both Sweden and elsewhere in the world are welcome.

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.

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/programmes-courses/postgraduate-studies/

Use this [APPLICATION FORM](#)

Further information:

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Applications, marked with **ref no ua 4355/2016**, must have arrived at the Registrar of SLU, P.O. Box 7070, S- 750 07 Uppsala or registrator@slu.se no later than **2017-01-10**.