

Post-doc on forest carbon balance and methods to estimate carbon flows

At Southern Swedish Forest Research Centre

Research area:

Forests play an important role in the global carbon cycle by sequestering carbon, and by substituting for products otherwise derived from fossil carbon with products derived from wood fibers. At the same time climate change poses increasing demands on the adaptive capacity of forests managed for production. These adaptive strategies can alter the choice of tree species, rotation times and thinning programs, which in-turn affects carbon sequestration and the potential to substitute fossil carbon. To make comparisons of different management programs in regards to their climate change mitigation potential, we need satisfactory measures of changing carbon stocks. This can be done through repeated measurements of soil and biomass carbon, or by *eddy-covariance*. The latter is a micrometeorological method which allows us to follow carbon fluxes in real-time at the system level. Biometric methods, on the other hand, gives us the changes in specific carbon pools, but with a much lower time resolution. Resolving the relative uncertainties and key differences between these two methods is vital for ensuring the reliability of future studies of carbon flows in production forests.

We are now looking for a highly-motivated candidate to fill a two-year post-doctoral position. The main task of the candidate will be to perform a study comparing biometric and micrometeorological methods to estimate carbon flows. The candidate should also, in cooperation with the supervisor, develop her/his own research. It is therefore requested to supplement the application with a description of 2-3 research questions (maximum 1 page), concerning forest climate change adaptation and/or mitigation that the applicant would like to develop in future research. In addition, we will encourage and provide opportunities for the candidate to collaborate with the holder of the second post-doc position in climate related issues that is also now available at the department.

Competence:

The applicant shall have a doctoral degree in silviculture, forest ecology, soil ecology, ecophysiology, biogeophysics or related fields. Candidates with a doctoral degree not older than seven years will be prioritized. Excellent spoken and written English is expected. Successful applicants should have a demonstrated ability to design and conduct research both independently and within a team. Driving license and field-work experience is a requirement.

Assessment criteria:

Consideration for the appointment is primarily based upon indicators of the applicant's academic skills. The assessment will include an evaluation of the applicant's publication record and a demonstrated ability to develop an independent line of research within the field. It is an

advantage if the candidate has a good understanding of international research in the research areas and that she/he also has international contacts in the same field.

Place of work:

Alnarp campus in southern Sweden

Form of employment:

Two year post-doc position.

Extent:

100%

Starting:

By agreement, but as soon as possible

Application: Apply here:

<https://www.slu.se/om-slu/lediga-tjanster/?rmpage=job&rmjob=303&rmlang=SE>

No no later than Dec 17, 2017.

SLU is an equal opportunity employer.