

Postdoctoral fellowship: Biodiversity and biological control

Project description: We invite applications for a two-year post-doctoral position fellowship for research on ecosystem services in multifunctional agricultural landscapes. Determining the links among species diversity, species interactions and the levels of ecosystem services is a major area of ecological research. We know that landscape management and agricultural practices have pervasive effects on biodiversity. We know less about how predator and parasitoid biodiversity affects the ecosystem service biological control of insect crop pests, and whether or not diverse assemblages of natural enemies suppress prey populations better than species poor assemblages. A more predictive framework has been suggested to include natural enemy foraging mode and habitat domains in the analysis of webs of interacting enemies and prey. For instance, when dealing with predator assemblages that contain generalist natural enemies, it becomes important to consider the diversity of prey items in the food web. Composition of prey species may also affect interactions among predators. The successful applicant for this position is expected to carry out research concerning how habitat and landscape, species identity, community composition and food web structure, determine the delivery of the ecosystem service, biological control.



Swedish University of
Agricultural Sciences

The positions are part of the project **SAPES** (*Multifunctional Agriculture: Harnessing Biodiversity for Sustaining Agricultural Production and Ecosystem Services* - <http://www.lu.se/o.o.i.s/23810>). The project is a collaboration between three Swedish universities: Lund University, Stockholm University and the Swedish University of Agricultural Sciences. SAPES aims at determining the consequences of agricultural land-use on biodiversity, and the ability of interacting below- and above-ground communities of organisms to produce ecosystem services. We explore opportunities for integrating biodiversity conservation with agricultural production to benefit ecosystem services. The post doc will collaborate to produce scale dependent production functions linking land use to ecosystem service delivery, in order to understand trade-offs and synergies among multiple services and with biodiversity conservation. The position forms part of a strong interdisciplinary research environment that generates cutting-edge research to promote sustainable agriculture.

Qualifications: Applicants should have a PhD in ecology, agronomy or other related research area. A person who holds a foreign degree that is deemed equivalent to a doctorate shall be qualified for appointment. The applicant needs to have a PhD from a non-Swedish university and cannot have been employed at the Swedish University of Agricultural Sciences university. Previous work on biological control of insect pests in agroecosystems is important for this position. Statistical and modeling skills as well as experience in landscape level research are desirable.

The main criteria for the evaluation of applicants will be scientific skills. Emphasis will also be put on the extent to which the applicant can contribute to the interactions within the SAPES programme. Documented experience of collaboration among research areas will also be regarded as a qualification. Excellent skills in written and oral communications are required. The University strive to achieve an even gender balance. Therefore, applications from women, as well as from men, are encouraged.

Closing date for applications: 5 March, 2012

Date of appointment: As soon as possible

Form of employment: The appointment is limited to two years, fulltime (100%). A scholarship will be given.

Placement: The position is placed at the Department of Ecology, Swedish University of Agricultural Sciences in Uppsala, Sweden. <http://www.slu.se/ecology>

Application: Applications should be posted or e-mailed to Professor Barbara Ekbom at the address below and be post marked no later than **5 March 2012**. Applications should include a letter of interest, curriculum vitae with publications list, copies of degree certificates and transcripts of academic records (all attested), and a list of two persons who may act as references (with phone numbers and email addresses).

Applications should be sent to:

Professor Barbara Ekbom

Swedish University of Agricultural Sciences, Department of Ecology

SE-750 07 Uppsala, Sweden

Or e-mail: Barbara.Ekbom@slu.se

For further information contact: Professor Barbara Ekbom +46 (0)18 67 26 25 e-mail:

Barbara.Ekbom@slu.se, or Dr. Riccardo Bommarco +46 (0)18 67 24 23 e-mail:

Riccardo.Bommarco@slu.se.