

PhD position Avian dispersal as adaptation to climate change (1.0 fte) (216295)

Organisation

Founded in 1614, the University of Groningen enjoys an international reputation as a dynamic and innovative center of higher education offering high-quality teaching and research. Flexible study programmes and academic career opportunities in a wide variety of disciplines encourage the 30,000 students and researchers alike to develop their own individual talents. As one of the best research universities in Europe, the University of Groningen has joined forces with other top universities and networks worldwide to become a truly global center of knowledge.

The Groningen Institute for Evolutionary Life Sciences (GELIFES)

GELIFES, the largest institute of the Faculty of Mathematics and Natural Sciences (FMNS) fills a special niche in the life sciences by covering and integrating mechanistic, evolutionary and ecological approaches, aiming to understand adaptation on all levels of biological organisation. Researchers pursue fundamental questions while collaborating with partners from industry, medicine and other realms of society. Our research fields include behavioural biology, chronobiology, ecology, evolutionary biology, genetics and genomics, neurobiology, physiology and theoretical modelling, using a wide array of research tools. Research levels range from molecular and organismal to population and community, performed under laboratory, semi-natural and field conditions.

Job description

We are looking for a talented and enthusiast field-ecologist with a strong evolutionary and statistical background for a fully funded 4-year PhD position, funded through a grant from the Netherlands Organisation for Scientific Research (NWO). The PhD candidate will be working within the Conservation Ecology Group, which has an excellent track record in studying how organisms are affected by changing environmental conditions around the globe.

PhD candidates will receive excellent training through cutting-edge research projects, advanced courses and training opportunities, complemented by workshops on generic research, transferable skills and teaching. As a PhD candidate, you are committed to conduct independent and original scientific research, to report on this research in international publications and presentations, and to present the results of the research in a PhD dissertation, to be completed within 4 years.

Project summary:

Climate change leads to different speeds of seasonal adjustment in predators and their prey. Especially long-distance migratory birds have low flexibility in advancing their annual schedule, leading to increased mismatches with an advancing food peak and subsequent population declines. Most current research concentrates on the potential for evolutionary change within populations, but long-distance dispersal may be an even more viable alternative. The rational is that individuals arriving too late at their former breeding grounds continue migration until reaching a site with suitable phenology. Whether immigrants from southern origin contribute to the adaptive capacity of the population, depends on annual timing schedules of their offspring. These may be genetically early migrants, and hence will add genes to the local gene pool, potentially opening new directions for selection. Alternatively, individual timing is caused by ontogeny rather than genes, and these immigrants behave as native young, and will not contribute to the adaptive potential.

The aim of this project is to study the consequences of long-distance dispersal to individual birds and its potential role in adaptation to climate change. To accomplish this aim we will (1) experimentally mimic long-distance dispersal in pied flycatchers by translocation from the Netherlands to Sweden and study their fitness consequences, and (2) track migratory journeys and wintering grounds with geolocator-loggers of translocated young to study whether latitudinal variation in annual timing is due to genes or ontogeny. This study capitalizes on newly established experimental translocation tools, and recent tracking techniques in a model organism for adaptation to climate change.

This position is within a larger team working on the possibilities and constraints of adaptation to climate change. The current project will be highly integrated with another PhD candidate starting at the same

time working on a twin project, related to the genetic and ontogenetic mechanisms of timing variation, mostly with flycatchers in the laboratory in combination with chronobiologists from Groningen.

Qualifications

Specific requirements: MSc with specialization in (avian) field ecology or evolutionary ecology, and preferentially good field experience with birds. In possession of a license to perform animal experiments (art. 9 Wet op de dierproeven; the Dutch Experiments on Animal Act) or the willingness to obtain this. Driving license is a necessity.

In addition to specific qualifications outlined above, successful candidates will have completed a master's degree (or equivalent) in (Evolutionary) Ecology or a strongly related field. They have good command of English (oral and written), are enthusiastic and real team-workers, have a passion for science, are highly motivated to work within the field of evolutionary and field ecology, possess excellent communication skills and the ability to write scientific papers and deliver presentations.

Conditions of employment

The University of Groningen offers a salary of € 2,191 gross per month in the first year to a maximum of € 2,801 gross per month in the final year (salary scale Dutch Universities), based on a fulltime position (1.0 fte) excluding a 8% holiday allowance and a 8.3% end of the year bonus.

The position offered is for four years. Each successful candidate will first be offered a temporary position of one year with the option of renewal for another three years. Prolongation of the contract is contingent on sufficient progress in the first year to indicate that a successful completion of the PhD thesis within the contract period is to be expected. A PhD training programme is part of the agreement and the successful candidate will be enrolled in the Graduate School of the Faculty. The conditions of employment are available at the University of Groningen website under Human Resources: <https://www.rug.nl/about-us/work-with-us/>

Supervisors

- Prof. Christiaan Both
- Dr Raymond Klaassen

The preferred starting date is 15 January 2017.

Application

You may apply for this position until 3 November 23:59h / before 4 November 2016 Dutch local time by means of the application form (click on "Apply" below on the advertisement on the university website).

Applications for the position should include (as a single PDF file):

(for example)

- cover letter
- curriculum vitae, including details of bachelor and master degrees and publication list, if applicable
- detailed (1-2 pages) description of previous research experience, such as the bachelor/master research projects
- recommendation letter, preferable from someone who has knowledge of research experience of the candidate.

Unsolicited marketing is not appreciated.

Information

For information you can contact:

- Christiaan Both, +31 50 3632235, c.both@rug.nl
- Raymond Klaassen, +31 6 30107175, raymond.klaassen@rug.nl

(please do not use for applications)

[Apply](#)

Or: <http://www.rug.nl/about-us/work-with-us/job-opportunities/overview?details=00347-02S00056EP>