Social behaviour of shorebird populations in Madagascar: behaviour, demography and genetics

PhD studentship (3 years), Bielefeld University (Germany) & University of Bath (UK)

Supervisors: Prof. Oliver Krüger, Dr. Joe Hoffman and Prof. Tamás Székely

Mating systems and parental behaviour are among the most diverse social behaviours, and recent works suggest that the social environment influences these behaviours. Small plovers (*Charadrius* spp.) exhibit monogamous and polygynous breeding systems and some of this variation appear to relate to sex ratios. The objective of the studentship is to carry out fieldwork in three plover populations in Madagascar, and using molecular genetic analysis together with demographic modelling, test whether breeding systems are influenced by the social environment.

We seek a bright and motivated student with strong interests in evolutionary ecology and behavioural ecology. Willingness to carry out fieldwork in a harsh tropical environment is essential for this position. The student will search for nests, trap birds and take blood samples and record their behaviour. In addition, he/she will use molecular genetic methods to test hypotheses of mating system evolution, and develop demographic models to estimate key demographic properties of natural populations. Previous experience with avian field biology, statistical modelling and/or microsatellite genotyping is advantageous. Strong quantitative skills are essential, and willingness to programme is a must.

Fieldwork will be in a remote and pristine location in SW Madagascar. Commodities are extremely basic, the weather can be very harsh, and a great deal of walking and cycling are required. Opportunities for outside communication are very limited. You must be physically fit, hard-working and meticulous, and have a proven ability to work independently. You must have a positive attitude and an ability to look after yourself (i.e. cook your own meals, deal with logistics and organise your own work over extended periods).

The student will be based at the Department of Animal Behaviour at Bielefeld University (www.uni-bielefeld.de/(en)/biologie/vhf/index.html). The Department offers a stimulating international environment and an excellent research infrastructure with access to state-of-the-art techniques. The working language of the Department is English. The student will also spend some of his/her time at the Biodiversity Laboratory at the University of Bath (www.bath.ac.uk/bio-sci/biodiversity-lab/index.htm).

This studentship (E13/65%) is funded by the German Science Foundation (DFG) and is available for 3 years. Full funding is available for fieldwork and for attending conferences. Please send your CV, the name of 2 referees, and a concise statement of your research interests as a single PDF file to: oliver.krueger@uni-bielefeld.de. For further information concerning this studentship, please contact Oliver Krüger (oliver.krueger@uni-bielefeld.de), Joe Hoffman (joseph.hoffman@uni-bielefeld.de) or Tamás Székely (bssts@bath.ac.uk).

The University of Bielefeld is an equal opportunity employer. We welcome applications from severely handicapped people. We particularly welcome applications from women. Given equal suitability, qualifications and professional achievement, women will be given preference, unless particular circumstances pertaining to a male applicant predominate.

The deadline for applications is Friday 25 January 2013.

Interviews will be held in early February and the position is available as soon as possible.