MSc project on modelling frog distribution



Centre for Statistics in Ecology, Environment and Conservation

Department of Statistical Sciences University of Cape Town



MSc bursary in statistical ecology

The centre for Statistics in Ecology, Environment and Conservation (SEEC: www.seec.uct.ac.za/) at the University of Cape Town (UCT) has an MSc bursary available to work on modelling range-wide abundance patterns of moss frogs (*Arthroleptella lightfooti*) using acoustic monitoring data. We are looking for a student with a background in biology or environmental science with a strong quantitative (statistical or mathematical) angle or statistics students with a strong interest in biology or environmental science.

Lightfoot's moss frogs occur on the Cape Peninsula and their distribution is likely determined by climatic factors such as availability of water. Are the same factors also affecting the density of this species where it occurs? And how is it likely to be affected by climate change? We have developed new statistical methods for estimating frog densities from acoustic data (see http://john.measey.com/aSCR) and aim to get density estimates of moss frogs across their range.

This MSc is part of a larger project in collaboration with Dr John Measey at the Centre for Invasion Biology, Stellenbosch University, with funding from the National Geographic Society and the African Climate and Development Initiative.

The MSC bursary is for R 80'000.- per year for a maximum of 2 years (target duration 18 months).

To apply, please send us an application letter explaining your motivation to join SEEC, your CV including a list of publications and/or conference presentations, transcripts and names (and contact details) of two academics who have taught, supervised or worked alongside you. Please send your application to Sue Kuyper (Sue.Kuyper@uct.ac.za) by 21 November 2016.

For more information, please contact Res Altwegg (Res.Altwegg@uct.ac.za).

The University of Cape Town reserves the right to: disqualify ineligible, incomplete, inappropriate and/or late applications, and to change the conditions of award or to make no awards at all.