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THE PERCY FITZPATRICK INSTITUTE OF AFRICAN ORNITHOLOGY

Study opportunity: PhD research at the Percy FitzPatrick Institute of African Ornithology, Department of Zoology, University of Cape Town

Project: Predicting influences of climate change on cavity-nesting hornbills in the Kalahari

We invite applications for the above full-time study opportunity at the FitzPatrick Institute, a world-renowned, national Centre of Excellence (CoE) in ornithological research with a strong emphasis on postgraduate studies.

Southern Africa's Kalahari region is predicted to experience among the fastest rates of temperature rise globally as a consequence of climate change: a warming trend has already been experienced in the region over the past three decades. The Percy FitzPatrick Institute has a major research thrust (the "Hot Birds Project" - HBP) based in the Kalahari, exploring the likely consequences of such temperature rise for desert-living birds. One of the HBP study sites is the Kuruman River Reserve (KRR), near Vanzylsrus in the Northern Cape, South Africa.

There is an opportunity for a PhD student to join the HBP at the KRR to investigate how high air temperatures influence the breeding behaviour and performance of Southern Yellow-billed Hornbills *Tockus leucomelas*. These are cavity-nesting birds that breed during the hot, summer months. The male is solely responsible for provisioning of the incubating female and the chicks, placing considerable energetic demands on males. The majority of the semi-habituated population at the KRR breeds in artificial nest boxes, opening opportunities for thermal manipulation of the nest environment and the provision of supplementary food.

The key focus areas of the project are a) the extent to which the ability/willingness of males to provision their breeding mates and offspring is affected by air temperature, and b) the extent to which male investment and/or the thermal environment of the nest affects breeding success via influences on either female reproductive investment, chick development rates, or both. The ultimate objective is to assess the likely consequences of climate change for the performance/persistence of this species in the Kalahari region.

The successful applicant will have an MSc degree in Zoology (or equivalent), relevant ornithological field experience, the ability to work in a hot environment (regularly >40°C) and be available to join the Programme in January 2012.

Funding is secured for an annual R100 000 CoE bursary for two years and for project running costs.

To apply, please send a CV (including your academic record & names and contact details of three referees) and a short motivation for why you wish to undertake this research to Hilary Buchanan at hilary.buchanan@uct.ac.za. For more information on the project, please contact: Dr Susie Cunningham (susan.cunningham@uct.ac.za).

Closing date: 18 November 2011

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Visit our website: <http://www.fitzpatrick.uct.ac.za>

IMAGE: Yellow-billed Hornbill, photographed by Peter Ryan.

