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THE PERCY FITZPATRICK INSTITUTE OF AFRICAN ORNITHOLOGY

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

Project: Changing breeding syndrome of African Black Oystercatchers



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.

The endemic African Black Oystercatcher *Haematopus moquini* is the only species of oystercatcher to breed in Africa, where it is confined to the coasts and offshore islands between Lüderitz and the Eastern Cape, with a handful of pairs in southern KwaZulu-Natal. The FitzPatrick Institute's Black Oystercatcher Programme is a long-term research activity (>30 years) that has gained a very good

understanding of many aspects of the biology and population dynamics of African Black Oystercatchers.

There is an opportunity for an MSc student to join the Institute's Black Oystercatcher Programme to investigate the changing breeding syndrome of African Black Oystercatchers. In the past two decades, birds have been laying an increased proportion of three-egg clutches (of which there are only two records prior to 1975): there is at least one record of a four-egg clutch. The past two decades have also seen a substantial increase in the global population size (due in part to an increase in the food supply), with a concomitant increased pressure for territories. The increased frequency of three-egg clutches represents a substantial change in life history for a strongly *k*-selected species. Although not yet confirmed genetically, there is strong circumstantial evidence for the (rare) appearance of polygyny. Apart from using the 33-year database to track the changing reproductive performance of the birds (including changing clutch sizes and egg dimensions over time), this project will address the following specific questions. 1) Does the increase in three-egg clutches represent an increase in breeding effort, or can three-egg clutches be attributed to polygynous trios? 2) Do three-egg clutches translate into increased reproductive performance (relative to the modal two-egg clutches)? 3) Can an increase in three-egg clutches be linked spatially to changing food supplies?

The successful applicant will have a BSc Honours degree in Zoology (or equivalent), relevant ornithological field experience, a valid driver's license and be available to join the Programme in January 2012 (preferably earlier).

Funding is secured for an annual R75 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 as to why you wish to undertake this research to Hilary Buchanan at hilary.buchanan@uct.ac.za. For more information on the project, please contact Prof. Phil Hockey at phil.hockey@uct.ac.za.

Closing date: 9 December 2011

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

IMAGE: African Black Oystercatchers (Photo: Peter Ryan)