



BRENDAN RYAN

*White-bellied Sunbird*

## SUNBIRDS – AFRICA’S JEWELS

Two undeniable features can be attributed to tropical habitats: their high biodiversity and the dramatic threat that human activities pose to this biodiversity. The montane habitats of Africa are scattered along a chain of mountains running for some 5 000 kilometres through the eastern half of tropical and subtropical Africa, from the Ethiopian plateau in the north to the coastal areas of South Africa. To the west are isolated mountain chains in Cameroon and Angola. Some of these montane habitats are within sight of one other, whereas others are separated by hundreds of kilometres. Yet in nearly all cases the intervening vegetation appears to form an effective barrier to dispersal for species that

breed only in these high-altitude environments. The montane habitats of Africa can thus be considered as ecological islands, providing a fascinating system for testing many aspects of ecological theory.

The Percy FitzPatrick Institute, in a project spearheaded by Rauri Bowie, has initiated research to explore the relationships between the birds of these montane fragments of sub-Saharan Africa. The objective is to use the information gathered to help improve current conservation policy for these often species-rich, fragile environments. Particular focus is being placed on the sunbirds (Nectariniidae) because of their high species richness and endemism, and for the

important role that they play in plant pollination.

The research project has two main components. The first consists of a morphometric and DNA-based study of a large percentage of the 84 African sunbird species. This component is essential if cryptic species and subspecies are to be identified. The second component will focus exclusively on the double-collared sunbirds, of which there are 15 recognised species in Africa. Whereas some of the species are fairly broadly distributed, the majority have extremely limited ranges and in some cases populations that are likely to total less than 2 000 individuals. Among these are Neergaard’s Sunbird, which is a South

African Red Data Book species.

Preliminary results of genetic studies suggest that the taxonomy of the Nectariniidae is confused. Perhaps not unexpectedly, the sugarbirds (*Promerops*) do not form part of the Nectariniidae but, interestingly, neither do the spiderhunters (*Arachnothera*) of Asia. The closest relatives of the sunbirds seem to be the Asian flowerpeckers (*Prionochilus* and *Dicaeum*). Within the sunbirds, the Asian genus *Aethopyga* appears to be the most ancient, and the genus *Anthreptes* has little taxonomic significance, being little more than a dumping ground for short-billed sunbirds. Doubtless more fascinating findings will come to light next year after Bowie has spent an extended field season in East Africa.

*This research is partially funded by the Skye Foundation and the Charitable Trust. Anyone interested in sponsoring the project or providing equipment, supplies or assistance for fieldwork should please contact Rauri Bowie by fax at (021) 650-3295 or e-mail [rbowie@botzoo.uct.ac.za](mailto:rbowie@botzoo.uct.ac.za)* □

Visit the  
FitzPatrick website:  
<http://www.uct.ac.za/depts/fitzpatrick>

Percy FitzPatrick Institute of  
African Ornithology,  
University of Cape Town,  
Rondebosch 7701,  
Cape Town, South Africa.  
Phone (021) 650-3290;  
fax (021) 650-3295;  
[e-mail birds@botzoo.uct.ac.za](mailto:e-mail_birds@botzoo.uct.ac.za)