

Forest bird longevities in NW Tanzania

Liz Baker¹ & Terry Oatley²

¹Tanzania Bird Atlas, PO Box 9601, Moshi, Tanzania

²Avian Demography Unit, UCT, Rondebosch 7701, South Africa

Introduction

During July and August 2000, we undertook a survey of the birds of the Minziro Forest (01°06'S, 31°30'E) as part of the East African Crossborder Biodiversity Project. The Project aims to reduce biodiversity loss at specific cross-border sites in Kenya, Uganda and Tanzania. The forested area straddles the northern border of Tanzania and extends into Uganda, where it is known as the Malabigambo Forest. Minziro Forest Reserve is 24 841 ha; an estimated 19 000 ha is closed forest with the remainder being composed of *Acacia polyacantha* woodland and seasonally flooded grassland (Baker 2001). The avifauna of this forest is dominated by lowland equatorial rain forest species of West African affinity, many of which are not known to occur elsewhere in Tanzania (Baker & Hirslund 1987; Baker & Baker 1994).

In 1984, Neil Baker and Per Hirslund made a short visit to Minziro Forest Reserve and added seven species to the Tanzanian list. In 1987, Neil and Liz Baker led a team of 8 ringers and observers to further investigate the birds of this poorly known forest reserve anticipating that more additions to the Tanzania list would be found there. This proved to be the case, and 14 more species were added, most of which were captured in mist nets (Baker unpubl.). A total of 427 birds of 67 species were ringed in a net line maintained for 18 days. A third expedition in November–December 1993 to a different part of the forest (approximately 4 km from the 1987 site) ringed a further 384 birds of 51 species.

The purpose of the July 2000 survey was to update the ornithological inventory, to check for the presence of species known to occur on the Ugandan side of the border but

hitherto unrecorded from Tanzania, and hopefully to retrap some individuals ringed in 1987. All three objectives were achieved and this note serves to place on record the retraps that came to hand.

Methods and survey period

A netline of 250 m was set up along the exact same footpath used in the 1987 survey. Nets remained in position from initial erection on 24–25 July to noon on 3 August. A further 18 m of nets were erected on 27 July and remained in place until 3 August. Lower shelves of nets were lifted at dusk (high enough to allow Bushbuck *Tragelaphus scriptus* to walk underneath) and dropped again at dawn. No birds were caught in the open upper shelves between dusk and dawn, and the only nocturnal capture was a single bat, caught just before dawn. Nairobi-address rings supplied by the East African Natural History Society were used in all three surveys.

Results and discussion

A total of 363 birds of 58 species were caught and ringed. An additional seven birds of six species bearing rings from the 1987 survey were retrapped; the elapsed times exceed longevity records published by Fry *et al.* (1988) and Keith *et al.* (1992) for five of the six species (Table 1). No birds were caught from the 1993 survey. The retrap dates were randomly distributed through the survey period and it is improbable that all the 1987-ringed individuals still alive in July–August 2000 were retrapped. Had the netting period been extended by days or weeks, it is likely that proportionately more retraps would have come to hand.

All of the retrapped birds were aged as

Table 1. Birds ringed in Minziro Forest in July 1987 and retrapped in July–August 2000. Previous longevities are those published in Birds of Africa Vols 3 & 4 (Fry *et al.* 1988 and Keith *et al.* 1992).

Species	Ring number	Date of ringing & time	Recapture date & time	Body mass (g) 1987 & 2000	Elapsed time	Number ringed in 1987 & 2000	Previous longevity
Rufous Thrush <i>Sitcorina fraseri</i>	A40881	10-07-87 at 11:00	27-07-2000 at 12:15	34.3 & 36.3	13y0m17d	6 & 3	8y
Firecrested Alethe <i>Alethe diademata</i>	A40796	14-07-87 at 08:00	27-07-2000 at 18:00	31.9 & 34.0	13y0m13d	14 & 34	8y
Little Greenbul <i>Andropadus virens</i>	J187930	11-07-87 at 09:00	28/07/2000 at 17:00	28.5 & 25.3	13y 0m17d	10 & 7	7y 9m
Cameroon Sombre Greenbul <i>Andropadus curvirostris</i>	J187925	09-07-87 at 18:00	29-07-2000 at 15:00	27.0 & 25.0	13y0m20d	12 & 11	19y 6m
Greentailed Bristlebill <i>Bleda eximia</i>	A35188	06-07-87 at 07:00	29-07-2000 at 18:30	38.1 & 40.5	13y0m23d	17 & 11	10y
Greentailed Bristlebill <i>Bleda eximia</i>	A40760	08-07-87 at 09:00	30-07-2000 at 09:40	36.0 & 39.0	13y0m22d	17 & 11	10y
Brown Illadopsis <i>Illadopsis fulvescens</i>	J187955	14-07-87 at -	02-08-2000 at 07:30	27.0 & 28.5	13y0m19d	4* & 7	3y 3m

*An additional 12 unassigned (to species) Illadopsis individuals were ringed in 1987

adults when originally ringed in 1987. This means that they must then have all been in their second year of life (at least) and certainly not less than 15 months old (the age at which forest passerines such as these complete their first full moult). Not one of these seven individuals was therefore less than 14 years of age when retrapped.

It is noteworthy that the number of 1987-ringed birds of each species at risk of retrap in Minziro Forest was comparatively small (Table 1). The statistical probability of recapture of even one bird after a lapse of 13 years from such small sample of ringed individuals would be infinitesimal if the relevant species were not naturally long-lived. In Britain, for example, it was necessary to ring 777 074 Great Tits *Parus major* before an individual of similar age (13.9 years) was recovered (Mead & Clark 1991). These Minziro retraps, in addition to establishing new longevities for six species, further supplement the growing body of evidence for superior survival rates in many African passerines (Peach *et al.* 2001).

Acknowledgements

We wish to record our appreciation for financial and logistical support provided by the Cross Border Biodiversity Programme and particularly to the Programme Officer in Bukoba District, Ms. Goody Pamba. The

success of the survey was in no small measure due to the combined efforts of the full and part-time members of the survey team and we thank Marc Baker, Katie Boswell, Claire Bowditch, Jairo Jumamosi, Njano Mbillinyi, Lindy McBride, Richard Miller and Lauren Persha for their assistance.

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Stop Press: Garden Warbler retrap in Tanzania¹

Garden Warbler *Sylvia borin* K20936 was first ringed by Liz Baker on 12 January 1997. It was controlled on 21 March 1999 and held captive during Max-Planck experiments until released on 10 April 1999. It arrived back on Kifufu (our home on the edge of the lowland forest, south-west Kilimanjaro) this morning 12 October 2001. Wintering site fidelity is of course well known for many Palearctic migrants but it's always great fun to catch one's own birds again, especially twice!!

Neil Baker
Tanzania Bird Atlas, PO Box 9601, Moshi, Tanzania.
email: kifufu@eoltz.com

¹ Taken from: AfricanBirding@yahooogroups.com