

- LEVENTIS, A.P. & OLMOS, F. 2009. *The Birds of São Tomé e Príncipe: a photoguide*. Aves & Fotos Editora, São Paulo.
- MELO, M. & FUCHS, J. (2008) Phylogenetic relationships of the Gulf of Guinea *Alcedo* kingfishers. *Ibis* 150: 633–639.

Received 16 August 2011; revised 5 September 2011

Peter G. Ryan

Percy FitzPatrick Institute of African Ornithology, University of Cape Town,
Rondebosch 7701, South Africa <pryan31@gmail.com>

Occurrence of two common forest bird species in Amurum Forest Reserve on the Jos Plateau, Nigeria

Amurum Forest Reserve on the Jos Plateau (9°53'N, 8°59'E) covers 300 ha of mostly savannah scrubland, gallery forest and inselbergs (rocky outcrops) (Ezealor 2002) and lies at 1300 m above sea level. Most rain occurs from around May to August, while the dry season is between October and March, with an average rainfall of 1400 mm per year; temperature range is 20–25 °C (< 10 °C in extreme cases) during the coldest months and 30–35 °C during warm and dry months (Payne 1998). Although the reserve is protected, much of the surrounding vegetation has been cleared for farmland and high levels of cattle and goat grazing occurs around the periphery. The core of the reserve faces continued loss of standing trees through fuelwood collection, as well as illegal setting of fires, gully erosion, and invasion by *Lantana camara*. In spite of this, gallery forests surrounding seasonal streams, which form parts of the fragmented system of lush gullies that extended into the Jos Plateau and other savannah areas, still persist and are likely acting as biological corridors for species movements (Seaman & Schulze 2010). The A.P. Leventis Ornithological Research Institute (APLORI) has monitored the avifauna since 2001, so immigration of new species can be detected.

On 10 Oct 2006, a Yellowbill *Ceuthmochares aereus* was caught in a mist net in a relatively open area of savannah scrub in the reserve (Fig. 1). On 9 Feb 2007, 10 Mar 2007 and 21 Mar 2011 Little Greenbuls *Andropadus virens* were caught in mist nets in gallery forest (Fig. 2) and on 30 Jun 2011, a song of this species was heard from the gallery forest close to one of the capture sites.

Both are widespread, common, generalist foragers that prefer forest edge and disturbed habitat (Fry *et al.* 1988, Keith *et al.* 1992), and are able to breed in degraded forest. Conversion of primary to secondary forest has been shown to result in an increase in population size of the Little Greenbul (Kofron & Chapman 1995; Smith *et al.* 2008), but with negative consequences for individual fitness (Smith *et al.* 2008). Previously, the nearest records of both species were 62 km from Amurum at Kurra Falls forest in

Plateau State (Turshak 2008) and they were also known 98 km away at Kagoro-Nindam forest reserves in Kaduna State (Abalaka & Manu 2007). Both of these sites are experiencing high and apparently unsustainable anthropogenic pressures (Ezealor 2001).



Figure 1. Yellowbill *Ceuthmochares aereus* caught at Amurum Forest Reserve in October 2006.

Post-breeding dispersal of young birds, rains migrations, or increasing anthropogenic pressures may all contribute to bird movements (Alerstam *et al.* 2003, Newton 2008, Boyle *et al.* 2010). The occurrence of various forest birds further north than the forest zone where suitable gallery forest exists, is also known. These records may be vagrants, extensions of the former range or, more likely, reoccupations of part of the northern extremity of the former range, with Amurum being part of the historical range. Such range extremities are especially likely to suffer periodic extinction and recolonization.

Special thanks to Mr A.P. Leventis for funding APLORI and to Prof. Jan T. Lifjeld and the National Centre for Biosystematics, Natural History Museum, Oslo, Norway. We are also grateful to N. Owen and Will Creswell for their comments on earlier drafts. This is contribution no. 52 from the A.P Leventis Ornithological Research Institute.



Figure 2. Little Greenbul *Andropadus virens* caught at Amurum Forest Reserve in March 2007.

References

- ABALAKA, J.I., & MANU, S. (2007) Factors affecting forest bird diversity and recent avifaunal changes in the degrading Kagoro-Nindam forest reserves, Kaduna, Niageria. *Ostrich* 78: 233–238.
- ALERSTAM, T., HEDENSTROM, A. & AKESSON, S. (2003) Long-distance migration: evolution and determinants. *Oikos* 103: 247–260.
- BOYLE, W., NORRIS, D. & GUGLIELMO, C. (2010) Storms drive altitudinal migration in a tropical bird. *Proc. Roy. Soc. B Biol. Sci.* 277: 2511–2519.
- EZEALOR, A.U. (2001) Nigeria. Pp. 673–692 in FISHPOOL, L.D.C & EVANS, M.I. (eds) *Important Bird Areas in Africa and Associated Islands*. Pisces, Newbury.
- FRY, C.H., KEITH, S. & URBAN, E.K. (1988) *The Birds of Africa*, vol. 3. Academic Press, London.
- KEITH, S., URBAN, E.K. & FRY, C.H. (1992) *The Birds of Africa*, vol. 4. Academic Press, London.
- KOFRON, C.P. & CHAPMAN, A. (1995) Deforestation and bird species composition in Liberia, West Africa. *Trop. Zool.* 8: 239–256.
- NEWTON, I. (2008) *The Migration Ecology of Birds*. Academic Press, London.
- PAYNE, R.B. (1998) A new species of firefinch *Lagonosticta* from northern Nigeria and its association with the Jos Plateau Indigobird *Vidua maryae*. *Ibis* 140: 368–381.
- SEAMAN, B.S. & SCHULZE, C.H. (2010) The importance of gallery forests in the tropical lowlands of Costa Rica for understorey forest birds. *Biol. Conserv.* 143: 391–398.
- SMITH, B.T., MILA, B., GREYER, G.F., SLABBEJOORN, H., SEPIL, I., BUERMANN, W., SAATCHI, S. & POLLINGER, J.P. (2008) Evolutionary consequences of human disturbance in a rainforest bird species from Central Africa. *Molec. Ecol.* 17: 58–71.
- TURSHAK L.G. (2008) Effects of habitat structure and altitudinal gradients on avian species diversity at Kurra Falls Forest. Unpubl. M.Sc. Thesis, University of Jos, Nigeria.

Received 23 September 2011; revised 27 October 2011.

Taiwo Crossby Omotoriogun^{1,2}, Grace Torkura Sengohol², Matthew C. Stevens³
& Daniel T.C. Cox^{2,4}

¹National Centre for Biosystematics, Natural History Museum, Univ. of Oslo, Norway. <t.c.omotoriogun@nhm.uio.no>

²A.P. Leventis Ornithological Research Institute, Lamina, Jos Plateau State, PO Box 1304, Nigeria.

³The Hawk Conservancy, Sarson Lane, Weyhill, Andover, Hampshire, SP11 8DY, U.K.

⁴School of Biology, Univ. of St Andrews, Bute Building, St Andrews, Fife, KY16 9TS, U.K.