Birds of Niaouli forest, southern Benin

Maarten van den Akker

La forêt de Niaouli se trouve sur le terrain d'une station de recherche agricole dans le sud du Bénin. Protégée depuis 1997, cette forêt semi-décidue de 150 ha (110 ha de forêt de plateau et 40 ha de forêt de bas-fonds) forme un îlot forestier dans la région. Des recherches ornithologiques ont été effectuées depuis 1997 pour établir un inventaire et étudier la migration intra-régionale. Au total, 166 espèces d'oiseaux ont été identifiées, dont 14 nouvelles pour le Bénin: l'Engoulevent à épaulettes noires *Caprimulgus nigriscapularis*, le Martin-pêcheur à ventre blanc *Corythornis leucogaster*, le Barbican chauve *Gymnobucco calvus*, le Barbion grivelé *Pogoniulus scolopaceus*, l'Indicateur pygmée *Prodotiscus insignis*, l'Indicateur tacheté *Indicator maculatus*, le Bulbul à queue blanche *Baeopogon indicator*, la Camaroptère à sourcils jaunes *Camaroptera superciliaris*, l'Erémomèle à tête brune *Eremomela badiceps*, l'Hyliote à dos violet *Hyliota violacea*, l'Akalat à ailes rousses *Illadopsis rufescens*, la Mésangette rayée *Pholidornis rushiae*, le Gonolek fuligineux *Laniarius leucorhynchus* et le Pyréneste ponceau *Pyrenestes ostrinus*.

B enin lies in the Dahomey Gap, a region characterised by relatively low annual rainfall (800–1,400 mm) and by the presence of savanna almost to the coast, with a nearcomplete lack of the tropical forest that is a feature of coastal zones in adjacent countries. Until the 1970s, however, the region between the coast and up to 150 km inland still held relatively large patches of tall forest, typical of the Guinea-Congo vegetation zone²¹. High human population in the tropical south, where densities reach 250–416 per sq km²³, has resulted in virtually all of this forest being cleared for agriculture^{5,27}. Only small 'islands' remain: typically sacred areas, small privately owned holdings, and some state-owned areas consisting of plantations and small parcels of secondary forest.

In 1997, the author initiated a forest protection programme in collaboration with the Dutch Embassy, Centre Béninois pour le Développement Durable (CBDD) and the Netherlands Committee of the International Union for Conservation of Nature (NC-IUCN). This led to the protection of one of the remaining forest islands, at Niaouli. The main objective is the conservation of extant natural forest, as well as research on flora and fauna for environmental education and ecotourism.

Niaouli is situated c70 km north of Cotonou (06°44'N 02°09'E). The forest belongs to the national agricultural research station Niaouli Attogon, and consists of a plateau (dry) forest and a wetter bas-fond (humid) forest covering 150 ha in total. A reforestation belt (15 ha) protects the forest against bush fire spreading from adjacent agriculture, and c20 ha of degraded forest have been reforested with indigenous trees, including flowering species, eg *Milicia excelsa* and *Cassia siamea*, to enable bee-keeping activities. Three local rangers enforce a hunting and cutting ban. Other measures have been designed to compensate local

villagers who previously used the area as a source of firewood and for hunting. Two ecological trails, one through each forest type, as well as an observation tower on the plateau, were constructed to facilitate education on environmental and natural resources.

Since 1997, several inventories have documented the flora and fauna. A detailed checklist of the avifauna is being prepared through regular field observations and mistnetting, with the aim of not only identifying which species use the forest but also their population densities.

In 2000, an additional small research project was established in five other forests in southern Benin. In each, an inventory is being prepared using the same methods as above, and birds are ringed with the help of the Institut für Vogelforschung 'Vogelwarte Helgoland' (Wilhelmshaven, Germany). One objective is to observe intra-regional migration of resident birds, between the remaining forest islands. For example, a Western Olive Sunbird *Cyanomitra obscura* ringed at Niaouli on 26 October 2001 was caught, on 13 February 2002, at Pobé (06°58'N 02°40'E), c80 km north-east of Niaouli.

The Benin literature

Such research will also contribute to our still limited knowledge of the Benin avifauna. In comparison with neighbouring countries, relatively little has been published on the ornithology of Benin, and as recently as 1993 evidence was available for the occurrence of only 425 species in the country¹⁵, although more recent work, including the present contribution, has increased this total to 570 species (Claffey pers comm).

The early literature is composed of contributions by specimen collectors^{13,24}, while several administrators and missionaries made additions in the colonial period^{7,9,14}.

These were relatively meagre, however, and do not compare with those for Togo, particularly in the early colonial period, when an important contribution was made to the knowledge of that country's avifauna¹⁰. In the post-colonial period there have been occasional studies and surveys, most notably Green & Sayer's survey of Arli and Pendjari National Parks¹⁸. Holyoak & Seddon²⁰ provided distributional notes from a brief visit to the country, while Claffey's survey of the Bétérou area, in 1987–1995¹¹, covers an area much further to the north, including the classified forests of Ouari Maro, Monts Kouffé and the Ouémé Supérieur (08°30'–09°12'N 02°00–02°16'E), as well as additional notes from Borgou and other areas. He also published several short notes during the 1990s.

Of forests in the south, Anciaux² inventoried the Allada Plateau, including Niaouli, in 1991–1994, recording 124 species. A preliminary inventory of Lama forest (06°55'– 07°00'N 02°04'–02°12'E) was published by Waltert & Mühlenberg²⁶, who recorded 106 species during 31 field days. More recently, Anciaux has published a study of intra-African migrants from work on the Allada Plateau and in the Lama depression³. Several unpublished reports, notably by Miriam Langeveld, who worked in the far north, have also been utilised in preparing the revised list of Benin birds (Claffey pers comm).

Niaouli forest

For the purposes of the research the forest was considered to comprise two distinct sections. While there were many similarities in the avifauna of the two, some interesting differences were observed. A total of 166 species was found in Niaouli on 125 field days (see Appendix 1) during January 1997 to May 2002. Of these, 151 occurred in the plateau forest, while 105 species were observed in the basfond forest.

Plateau forest

This forest covers c110 ha, including 25 ha of reforestation. Many of the semi-deciduous trees lose their leaves during the dry season (Fig 1). These consist of nine families and 13 species, eg Ceiba pentandra (Bombacaceae), Triplochiton scleroxylon (Sterculiaceae), Antiaris toxicaria and Milicia excelsa (Moraceae), and Dialium guineense (Caesalpiniaceae). Typical bird species of the upper storey are: African Cuckoo Falcon Aviceda cuculoides, African Harrier Hawk Polyboroides typus, African Green Pigeon Treron calva, Green Turaco Tauraco persa, Blue-throated Roller Eurystomus gularis, Naked-faced Barbet Gymnobucco calvus, Yellow-mantled Weaver Ploceus tricolor and Red-headed Malimbe Malimbus rubricollis. Understorey inhabitants include White-throated Greenbul Phyllastrephus albigularis, Grey-headed Bristlebill Bleda canicapilla, Brown Illadopsis Illadopsis fulvescens iboensis and Chestnut Wattle-eye Dyaphrophyia castanea.

Bas-fond forest

This forest is irrigated by three wells permitting evergreen vegetation throughout the year (Fig 2). It covers an area of c40 ha, including 10 ha of reforestation. The tree vegetation is much more diverse than in the plateau forest, consisting of 28 families and at least 63 species, eg Symphonia globulifera (Clusiaceae), Cleistopholis patens (Annonaceae), Cola gigantea, C. millenii and C. nitida (Sterculiaceae), Musanga cecropioides (Cecropiaceae), Piptadeniastrum africanum (Mimosaceae) and Entandrophragma angolense (Meliaceae) which in Benin occurs only in Niaouli. Differences in the vegetation are reflected in the avifauna. Typical species of the canopy include: Red-thighed Sparrowhawk Accipiter erythropus, Buff-throated Apalis Apalis rufogularis, Western Black-headed Oriole Oriolus brachyrhynchus and Chestnutwinged Starling Onychognathus fulgidus, while in the understorey are Little Greenbul Andropadus virens, Western Olive Sunbird, Blue-billed Malimbe Malimbus nitens and Western Bluebill Spermophaga haematina.

Discoveries and significant records

Of the 166 species observed (Appendix 1), 14 are additions to the preliminary Benin checklist (Claffey pers comm) and several others concern species for which there was little previous evidence. The first evidence of breeding in the country was noted for a number of species. Status in neighbouring Togo and Nigeria is taken from the respective checklists^{10,16}. Among the most interesting records are the following.

Red-thighed Sparrowhawk Accipiter erythropus

Uncommon resident in Benin (Claffey pers comm). Previously known only from January and April records in Arli and Pendjari Parks¹⁸. Several records at Niaouli including a female mist-netted on 5 October 2000 (wing length 174 mm, tarsus 43 mm, bill 12.5 mm, weight 133 g; Fig 3). The absence of white uppertail spots indicate the nominate race as would be expected (W S Clark pers comm). Green reported 'a very doubtful record of nesting' at Natitingou in 1978 (Claffey pers comm). I observed material being collected for a nest c40 m above ground, on 6 March 1999, while the male was observed bringing prey to the nest for the female, on 13–15 March 1999.

Black Sparrowhawk Accipiter melanoleucus

Only one previous record in the Forêt Classée de la Lama in 1994²⁵. Recorded five times at Niaouli (in January 1997, August 1998 [three records] and March 2002) and twice at Lokoli marsh forest (07°03'N 02°16'E), in September 2001 and a juvenile on 25 January 2002.

Thick-billed Cuckoo Pachycoccyx audeberti

The only previous Benin record was one identified by call in the Forêt Classée de l'Ouémé Supérieur (Claffey pers comm). In Niaouli, recorded in June 1998, February and March 1999, November 2001, and March–May 2002. A noisy bird, identified in flight by its slow wing action, and confirmed by its very characteristic vocalisation. Rare resident in Togo and recorded in Nigeria. Rare and patchily distributed in West Africa⁶.

Black-shouldered Nightjar Caprimulgus nigriscapularis

Previously unknown in Benin. Recorded at four different forests in southern Benin in January–March 2002. In Niaouli, the species was identified by voice three times, usually at sunset and dawn. During a full moon it was heard calling throughout the night, at intervals of 8–10 seconds, and once two individuals called simultaneously. One was mist-netted on 24 February 2002, in a humid area of Lokoli (wing length 149 mm, tarsus 14 mm, bill 13.5 mm, tail 124 mm, weight 42 g; Fig 4). Rare resident in Togo but not uncommon in Nigeria.

White-bellied Kingfisher Corythornis leucogaster

Not previously recorded in Benin. One record near the plateau on 11 February 1997. Separated from Malachite Kingfisher *C. cristata* by its white belly and the forest habitat⁶, it was perched on the lowest branch of a teak tree at the limit between forest and adjacent agricultural land. Rare resident in Togo and an uncommon resident in Nigeria.

Naked-faced Barbet Gymnobucco calvus

Not previously recorded in Benin. Gregarious and very common, with several large colonies in Niaouli. An easily distinguished, dull, thick-billed bird, it often exhibits woodpecker-like behaviour when searching for insects in dead trees. Common to locally abundant resident in Togo and Nigeria.

Speckled Tinkerbird Pogoniulus scolopaceus

Not previously recorded in Benin but probably overlooked as its secretive behaviour makes it difficult to observe in the understorey. Sixteen records in 1997–2001, with singles mist-netted on 21 February 1999, 20 September 2000, 26 October 2001 (wing length 54 mm, tarsus 14 mm, bill 14 mm, tail 31 mm, weight 16 g) and 16 May 2002 (wing length 54 mm, tarsus 13 mm, bill 15.5 mm, tail 30 mm, weight 15 g; Fig 5). Common resident in Togo and Nigeria.

Cassin's Honeybird Prodotiscus insignis

Not previously recorded in Benin. Inconspicuous and secretive, and thus easily overlooked. Nine observations: April 1997, June and August 1998, February 1999, November 2000 and March 2001. Identification was based on behaviour, shy and flycatcher-like⁶, small pointed bill and remarkable white outertail feathers. Rare resident in Togo and an uncommon resident in Nigeria.

Spotted Honeyguide Indicator maculatus

Not previously recorded in Benin. One, in June 1998, within scrub forest adjacent to the tall forest of Niaouli. A dark olive-green honeyguide, identification was based on the remarkable stripes on the belly and white undertail feathers with clearly visible dark barring. Uncommon resident in Togo and a rare resident in Nigeria.

Honeyguide Greenbul Baeopogon indicator

Not previously recorded in Benin. Three records (9 January and 20 February 1997, and 9 April 1998) within mixedspecies flocks, and a lone observation on 12 August 1998. All were in the lower storey. Similar to a honeyguide but more bulbul-like, the identification was based on the white outertail feathers while the white eye was noted on two individuals. Not uncommon resident in Togo and Nigeria.

Red-tailed Greenbul Criniger calurus

First recorded in Benin from Niaouli on 20 February and 5 March 1999¹. Another was mist-netted on 28 November 2000. Very common in Lokoli marsh forest. Not uncommon resident in Togo and a common resident in Nigeria.

Yellow-browed Camaroptera Camaroptera superciliaris

Not previously recorded in Benin. Six records (14 January, 20 May, 21 June and 30 July 1997, and 3 June and 18 August 1998). Identification of this small, short-tailed species was based on the yellow-olive upperparts, dull white underparts and obvious yellow supercilium. Uncommon resident in Togo and Nigeria.

Rufous-crowned Eremomela Eremomela badiceps

Not previously recorded in Benin. Three records, on 4 and 12 August 1998, and 20 February 1999. Identification was based on habitat, mid-storey of the forest⁶, typical insectivorous behaviour, the white throat, black breast-band and grey-white belly. Not uncommon resident in Togo and Nigeria.

Violet-backed Hyliota Hyliota violacea

Not previously recorded in Benin. A male was seen at close range from the observation tower on 15 May 2002, and identified by its remarkably dark upperparts, tail and head, white belly, and very active behaviour in the mid-storey, where it fed horizontally on the underside of leaves. Uncommon resident in Togo. Mackworth-Praed & Grant²² state that it also occurs east from Togo but there is only one previous record, in 1986, of this subspecies (*nehrkorni*) in Nigeria.

Rufous-winged Illadopsis Illadopsis rufescens

Not previously recorded in Benin. One was mist-netted on 7 June 2001 (wing length 77 mm, tarsus 26 mm, bill 18 mm, tail 60 mm, weight 37 g; Fig 6). Despite the resemblance to Puvel's Illadopsis *I. puvelli*, which also occurs in Niaouli, the mensural data and photographs permitted its identification as *I. rufescens* (L D C Fishpool pers comm). Listed as Near Threatened¹², it is a rare resident in Togo, with only one record. The present record extends its range further east.

Tit-hylia Pholidornis rushiae

Not previously recorded in Benin. Ten records: in February (two), April, May (two), June and July 1997, and June and August (two) 1998. This tiny finch-like bird was identified by its pale brown, finely streaked head, throat and breast, and brown upperparts. Often in small groups of 4–6 individuals. Rare resident in Togo and a locally not uncommon resident in Nigeria.

Sabine's Puffback Dryoscopus sabini

Previously known in Benin only from Brunel's specimen in Museum national d'Histoire naturelle (Paris), which has been identified as *D. s. sabini*⁴. Two records, on 13 March and 20 June 2001. Both were males, the first was within a large mixed-species flock in the mid-storey and the second was searching for insects in the lower canopy. They were distinguished by the obvious white belly and rump, and black head, back and tail. Uncommon resident in Togo and Nigeria.

Sooty Boubou Laniarius leucorhynchus

Not previously recorded in Benin. Two singles on 27 March 1999. This is the only bush-shrike that is all black, with a large black bill and black legs, and that is found in lowland forest¹⁷. Behaviour is closer to that of a true shrike. Rare resident in Togo (only one record) and Nigeria.

Black-bellied Seedcracker Pyrenestes ostrinus

Not previously recorded in Benin. Although Mackworth-Praed & Grant²² extrapolated that it occurred in the country, no documentation was available. Two were mistnetted, a male on 10 February 2001 (wing length 63 mm, tarsus 19 mm, bill 15.5 mm, tail 49 mm, weight 21.5 g; Fig 7) and a female on 30 January 2002 (wing length 69 mm, tarsus 17.5 mm, bill 16.5 mm, tail 53 mm, weight 21 g; Fig 8). Uncommon resident in Togo and Nigeria.

How to reach Niaouli

The forest is situated c1 hour north of Cotonou and 5 km from Allada, near Attogon. Follow the sign for the Centre Regional de Recherche Agricole, Niaouli for 3 km. The research station is on the left. Register at the small visitors centre. Reliable guides with good knowledge of the project, as well as the flora and fauna, are available, and it is possible to stay overnight.

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References

- 1. van den Akker, M. 2000. Red-tailed Greenbul *Criniger calurus* and Chestnut-breasted Negrofinch *Nigrita bicolor*, new to Bénin. *Bull. ABC* 7: 133.
- Anciaux, M.-R. 1996. Aperçu de l'avifaune dans différents milieux de l'intérieur des terres du Sud-Bénin. Plateau d'Allada et sud de la dépression de la Lama. *Cahiers* d'Ethologie 16: 79–98.
- 3. Anciaux, M.-R. 2000. Approche de la phénologie de la migration des migrateurs intra-africains de l'intérieur des terres du Sud-Bénin (plateau d'Allada et sud de la dépression de la Lama: 1. Les non passériformes et les non-Coraciiformes. *Alauda* 68: 311–320
- 4. Berlioz, J. 1956. Etude d'une collection d'oiseaux du Dahomey. *Bull. Mus. Natl. Hist. Nat.* 28: 17–264.
- 5. Bohlinger, B. 1998. Die spontane Vegetation in traditionellen Anbausystemen Benins—ihre Bedeutung und Möglichkeiten des Managements. Stuttgart: W. & S. Koch Verlag.
- 6. Borrow, N. & Demey, R. 2001. Birds of Western Africa. London, UK: Christopher Helm.
- Bouet, G. 1914. Liste des oiseaux recueillis ou observés au Dahomey de 1908 à 1911. *Rev. Française d'Ornithologie* 3: 263–269, 304–308.
- 8. Brown, L.H., Urban E.K. and Newman, K. (eds) 1982. *The Birds of Africa*. Vol 1. London, UK: Academic Press.
- 9. Brunel, J. 1958. Observations sur les oiseaux du Bas-Dahomey. *Oiseau et RFO* 28: 1-38.
- 10. Cheke, R.A. and Walsh, J.F. 1996. *The Birds of Togo: an annotated check-list*. BOU check-list No. 14. Tring: British Ornithologists' Union.
- Claffey, P.M. 1995. Notes on the avifauna of the Bétérou area, Borgou Province, Republic of Benin. *Malimbus* 17: 63–84.
- 12. Collar, N.J. and Stuart, S.N. 1985 *Threatened Birds of Africa and Related Islands: The ICBP/IUCN Red Data Book.* Cambridge, UK: International Council for Bird Preservation.
- 13. De Sousa, J.A. 1887. Aves de Dahomey. J. Cienc. Math. Phys. Nat. 44.
- 14. Douaud, J. 1953. Observations faites en mer le long de la côte occidentale d'Afrique. 15. *Alauda* 21: 179–185.
- 15. Dowsett R.J. and Dowsett-Lemaire F. 1993. A Contribution to the Distribution and Taxonomy of

Afrotropical and Malagasy Birds. Tauraco Research Report No. 5, Liège: Tauraco Press.

- Elgood, J.H., Heigham, J.G., Moore, A.M., Nason, A.M., Sharland, R.E. and Skinner, N.J. 1994. *The Birds* of Nigeria: an annotated check-list. BOU Check-list No. 4. Second edition. Tring: British Ornithologists' Union.
- 17. Fry, C.H., Keith, S. and Urban, E.K. (eds) 2000. *The Birds of Africa*. Vol 6. London, UK: Academic Press.
- 18. Green, A.A. and Sayer, J.A. 1979. The birds of the Pendjari and Arli National Parks. *Malimbus* 1: 14–19.
- 19. Grimes, L.G. 1987. *The Birds of Ghana: an annotated check-list*. BOU Check-list No. 9. Tring: British Ornithologists' Union.
- 20. Holyoak D.T. and Seddon, M.B. 1990. Distributional notes on the birds of Benin. *Malimbus* 11: 128–131.
- 21. Knapp R. 1973. *Die Vegetation von Afrika*. Stuttgart: Fischer Verlag.
- 22. Mackworth-Praed, C.W. and Grant, C.H.B. 1973. *Birds* of West Central and Western Africa. Vol 2. London, UK: Longman.
- 23. MPRE 1994. Deuxième Recensement Général de la Population et de l'Habitation (RGPH). Tome 1. Cotonou: MPRE.
- Oustalet, G. 1898. Catalogues des oiseaux du Dahomey remis par M. Miegemarque au Muséum d'Histoire Naturelle en 1895. *Bull. Mus. Hist. Nat.* 8: 361–364.
- 25. Sinsin, B., 1995. La Forêt Classée de la Lama: aperçu général d'un écosystème naturel aménagé dans un environnement socio-économique. Notes du Laboratoire d'Ecologie Appliquée de la FSA/UN Bénin No. 3.
- Waltert, M. and Mühlenberg, M. 1999. Notes on the avifauna of the Noyau Central, Forêt Classée de la Lama, Republic of Benin. *Malimbus* 21: 82–92.
- Wezel, A., Bohlinger, B. and Böcker, R. 2000. Vegetation zones in Niger and Benin—present and past zonation. In: *Atlas of natural and agronomic resources of Niger and Benin*. CD edition. Stuttgart: University of Hohenheim.

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Captions to photos on facing page

- Figure 1. Plateau forest at Niaouli, Benin (Maarten van den Akker)
- Figure 2. Bas-fond forest, Niaouli, Benin (Maarten van den Akker)
- Figure 3. Western Little Sparrowhawk *Accipiter erythropus*, basfond forest, Niaouli, Benin, 5 October 2000 (Maarten van den Akker)
- Figure 4. Black-shouldered Nightjar *Caprimulgus nigriscapularis*, Lokoli marsh forest, Benin, 24 February 2002 (Maarten van den Akker)
- Figure 5. Speckled Tinkerbird *Pogoniulus scolopaceus*, Niaouli plateau forest, Benin, 16 May 2002 (Maarten van den Akker)
- Figure 6. Rufous-winged Illadopsis *Illadopsis rufescens*, Niaouli plateau forest, Benin, 7 June 2001 (Maarten van den Akker)
- Figure 7. Male Black-bellied Seedcracker *Pyrenestes ostrinus*, basfond forest, Niaouli, Benin, 10 February 2001 (Maarten van den Akker)

Figure 8. Female Black-bellied Seedcracker *Pyrenestes ostrinus*, basfond forest, Niaouli, Benin, 30 January 2002 (Maarten van den Akker) Appendix 1. Species observed in Niaouli forest, January 1997–May 2002, and their abundance

Categories used to record abundance at Niaouli forest follow those used in the Ghana checklist $^{\rm 19}.\,$

| Abundant (A) | invariably encountered with little effort, in large numbers in preferred habitat |
|--------------------|--|
| Common (C) | invariably encountered singly or in small numbers in preferred habitat |
| Not uncommon (NUC) | often, but not invariably, met with in preferred habitat |
| Uncommon (UC) | infrequent and sporadic in preferred habitat |
| Rare (R) | rarely seen, often implying fewer than ten |

Nomenclature follows Birds of Africa Vols 1-6 and Borrow & Demey®

Ixobrychus minutus Bubulcus ibis Butorides striatus Egretta garzetta Aviceda cuculoides Machaeramphus alcinus Elanus caeruleus Milvus migrans Polyboroides typus Circus macrourus Accipiter tachiro Accipiter badius Accipiter erythropus Accipiter melanoleucus Kaupifalco monogrammicus Falco tinnunculus Falco ardosiaceus Falco cuvieri Falco biarmicus Francolinus bicalcaratus Amaurornis flavirostris Podica senegalensis Actophilornis africana Rostratula benghalensis Tringa totanus Treron calva Turtur tympanistria Turtur afer Streptopelia semitorguata Streptopelia senegalensis Tauraco persa Crinifer piscator Oxylophus levaillantii Pachycoccyx audeberti Cuculus clamosus Cuculus gularis Chrysococcyx cupreus Chrysococcyx klaas Chrysococcyx caprius Ceuthmochares aereus Centropus grillii Centropus senegalensis Centropus senegalensis epomidis Tyto alba Strix woodfordii Caprimulgus nigriscapularis Caprimulgus inornatus Telacanthura ussheri

| Africa Vols 1-6 and Borrow & Demey® | | |
|-------------------------------------|-----|--|
| Little Bittern | R | |
| Cattle Egret | С | |
| Green Heron | NUC | |
| Little Egret | R | |
| African Cuckoo Falcon | С | |
| Bat Hawk | NUC | |
| Black-shouldered Kite | NUC | |
| Black Kite | A | |
| African Harrier Hawk | NUC | |
| Pallid Harrier | R | |
| African Goshawk | С | |
| Shikra | С | |
| Red-thighed Sparrowhawk | NUC | |
| Black Sparrowhawk | R | |
| Lizard Buzzard | С | |
| Common Kestrel | UC | |
| Grey Kestrel | UC | |
| African Hobby | UC | |
| Lanner Falcon | R | |
| Double-spurred Francolin | А | |
| Black Crake | С | |
| African Finfoot | R | |
| African Jacana | С | |
| Greater Painted-snipe | R | |
| Common Redshank | R | |
| African Green Pigeon | С | |
| Tambourine Dove | С | |
| Blue-spotted Wood Dove | С | |
| Red-eyed Dove | С | |
| Laughing Dove | R | |
| Green Turaco | С | |
| Western Grey Plantain-eater | R | |
| African Striped Cuckoo | UC | |
| Thick-billed Cuckoo | UC | |
| Black Cuckoo | R | |
| African Cuckoo | UC | |
| African Emerald Cuckoo | R | |
| Klaas's Cuckoo | С | |
| Didric Cuckoo | UC | |
| Yellowbill | С | |
| Black Coucal | R | |
| Senegal Coucal | С | |
| Senegal Coucal | С | |
| Barn Owl | NUC | |
| African Wood Owl | С | |
| Black-shouldered Nightjar | R | |
| Plain Nightjar | C | |
| Mottled Spinetail | R | |

















Birds of Niaouli forest, southern Benin: van den Akker

Cypsiurus parvus Apus affinis Halcyon senegalensis Ceyx picta Corythornis leucogaster Corythornis cristata Merops albicollis Merops nubicus Eurystomus gularis Eurystomus glaucurus Tockus albocristatus Tockus fasciatus semifasciatus Tockus nasutus Gymnobucco calvus Pogoniulus scolopaceus Pogoniulus bilineatus Pogoniulus chrysoconus Buccanodon duchaillui Prodotiscus insignis Indicator maculatus Dendropicos pyrrhogaster Mirafra rufocinnamomea Hirundo senegalensis Hirundo abyssinica Hirundo smithii Hirundo rustica Motacilla flava Motacilla aguimp Anthus leucophrys Campephaga phoenicea Campephaga quiscalina Andropadus virens Andropadus curvirostris Andropadus gracilirostris Baeopogon indicator Chlorocichla simplex Thescelocichla leucopleura Pyrrhurus scandens Phyllastrephus albigularis Bleda canicapilla Criniger calurus Pycnonotus barbatus Stiphrornis erythrothorax Cossypha niveicapilla Turdus pelios Acrocephalus scirpaceus Acrocephalus arundinaceus Hippolais pallida Hippolais polyglotta Prinia subflava Apalis rufogularis Camaroptera brevicaudata Camaroptera superciliaris Camaroptera chloronata Eremomela pusilla Eremomela badiceps Sylvietta virens Macrosphenus concolor Hyliota violacea Hylia prasina Phylloscopus trochilus Phylloscopus sibilatrix

| African Palm Swift | C | Sylv |
|--|----------|--------------|
| Little Swift | C | Mela |
| Woodland Kingfisher | C NUC | Mus |
| African Pygmy Kingfisher White-bellied Kingfisher | R | Mus |
| • | R | Mus |
| Malachite Kingfisher White-throated Bee-eater | н С | Myia Fice |
| Carmine Bee-eater | B | |
| Blue-throated Roller | NUC | Bias |
| Broad-billed Roller | C | Dya Terp |
| White-crested Hornbill | R | Ter |
| African Pied Hornbill | A | Illad |
| African Grey Hornbill | R | Illao |
| Naked-faced Barbet | C | Illad |
| Speckled Tinkerbird | NUC | Pho |
| Yellow-rumped Tinkerbird | R | Cya |
| Yellow-fronted Tinkerbird | R | Cha |
| Yellow-spotted Barbet | R | Hed |
| Cassin's Honeybird | UC | Cinr |
| Spotted Honeyguide | R | Cinr |
| Fire-bellied Woodpecker | C | Cin |
| Flappet Lark | R | Cinr |
| Mosque Swallow | R | Dryo |
| Lesser Striped Swallow | UC | Dryc |
| Wire-tailed Swallow | UC | Tch |
| Barn Swallow | C | Lan |
| Yellow Wagtail | R | Nica |
| African Pied Wagtail | R | Prio |
| Plain-backed Pipit | NUC | Dicr |
| Red-shouldered Cuckoo-shrike | R | Orio |
| Purple-throated Cuckoo-shrike | R | Orio |
| Little Greenbul | A | Ony |
| Plain Greenbul | С | Larr |
| Slender-billed Greenbul | R | Larr |
| Honeyguide Greenbul | R | Cinr |
| Simple Greenbul | NUC | Ploc |
| Swamp Palm Bulbul | С | Ploc |
| Leaf-Love | NUC | Ploc |
| White-throated Greenbul | С | Ploc |
| Grey-headed Bristlebill | С | Ploc |
| Red-tailed Greenbul | R | Ploc |
| Common Bulbul | А | Mal |
| Forest Robin | С | Mal |
| Snowy-crowned Robin Chat | С | Mal |
| African Thrush | С | Que |
| Eurasian Reed Warbler | R | Amb |
| Great Reed Warbler | R | Nigr |
| Olivaceous Warbler | R | Nigi |
| Melodious Warbler | R | Nigi |
| Tawny-flanked Prinia | С | Pyre |
| Buff-throated Apalis | R | Spe |
| Grey-backed Camaroptera | С | Lag |
| Yellow-browed Camaroptera | UC | Lon |
| Olive-green Camaroptera | С | Lon |
| Senegal Eremomela | R | Vidu |
| Rufous-crowned Eremomela | UC | Seri |
| Green Crombec | NUC | |
| Grey Longbill | UC | |
| Violet-backed Hyliota | R | |
| Green Hylia | C | |
| Willow Warbler | R | |
| Wood Warbler | R | |

| Sylvia borin | Garden Warbler |
|-----------------------------------|---------------------------------|
| Melaenornis edolioides | Northern Black Flycatcher |
| Muscicapa striata | Spotted Flycatcher |
| Muscicapa ussheri | Ussher's Flycatcher |
| Muscicapa caerulescens | Ashy Flycatcher |
| Myioparus plumbeus | Grey Tit Flycatcher |
| Ficedula hypoleuca | Pied Flycatcher |
| Bias flammulatus | Shrike Flycatcher |
| Dyaphrophyia castanea | Chestnut Wattle-eye |
| Terpsiphone rufiventer | Red-bellied Paradise Flycatcher |
| Terpsiphone viridis | African Paradise Flycatcher |
| Illadopsis puvelli | Puvel's Illadopsis |
| Illadopsis rufescens | Rufous-winged Illadopsis |
| Illadopsis fulvescens iboensis | Brown Illadopsis |
| Pholidornis rushiae | Tit-hylia |
| Cyanomitra obscura | Western Olive Sunbird |
| Chalcomitra adelberti | Buff-throated Sunbird |
| Hedydipna collaris | Collared Sunbird |
| Cinnyris chloropygia | Olive-bellied Sunbird |
| Cinnyris venusta | Variable Sunbird |
| Cinnyris superba | Superb Sunbird |
| Cinnyris coccinigaster | Splendid Sunbird |
| Dryoscopus gambensis | Northern Puffback |
| Dryoscopus sabini | Sabine's Puffback |
| Tchagra australis | Brown-crowned Tchagra |
| Laniarius leucorhynchus | Sooty Boubou |
| Nicator chloris | Western Nicator |
| Prionops caniceps | Red-billed Helmet-shrike |
| Dicrurus adsimilis | Fork-tailed Drongo |
| Oriolus auratus | African Golden Oriole |
| Oriolus brachyrhynchus | Western Black-headed Oriole |
| Onychognathus fulgidus | Chestnut-winged Starling |
| Lamprotornis purpureiceps | Purple-headed Glossy Starling |
| Lamprotornis splendidus | Splendid Glossy Starling |
| Cinnyricinclus leucogaster | Violet-backed Starling |
| Plocepasser superciliosus | Chestnut-crowned Sparrow Wea |
| Ploceus cucullatus | Village Weaver |
| Ploceus nigerrimus castaneofuscus | Viellot's Black Weaver |
| Ploceus nigerrimus nigerrimus | Viellot's Black Weaver |
| Ploceus tricolor | Yellow-mantled Weaver |
| Ploceus superciliosus | Compact Weaver |
| Malimbus nitens | Blue-billed Malimbe |
| Malimbus scutatus | Red-vented Malimbe |
| Malimbus rubricollis | Red-headed Malimbe |
| Quelea erythrops | Red-headed Quelea |
| Amblyospiza albifrons | Grosbeak Weaver |
| Nigrita canicapilla | Grey-crowned Negrofinch |
| Nigrita fusconota | White-breasted Negrofinch |
| Nigrita bicolor | Chestnut-breasted Negrofinch |
| Pyrenestes ostrinus | Black-bellied Seedcracker |
| Spermophaga haematina | Western Bluebill |
| Lagonosticta rubricata | Blue-billed Firefinch |
| Lonchura cucullata | Bronze Mannikin |
| Lonchura bicolor | Black-and-white Mannikin |
| Vidua macroura | Pin-tailed Whydah |
| Serinus leucopygius | White-rumped Seedeater |
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Van Den Akker, Maarten. 2003. "Birds of Niaouli forest, southern Benin." *Bulletin of the African Bird Club* 10(1), 16–22. <u>https://doi.org/10.5962/p.309679</u>.

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