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Chapter 8

Rapid Survey of the Birds of Ajenjua Bepo and Mamang River Forest Reserves, Eastern Region of Ghana

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SUMMARY

During 11 days of field work (25 August – 4 September 2006) in Ajenjua Bepo and Mamang River forest reserves, 137 bird species were recorded, 121 at the former and 115 at the latter site. Only one species of conservation concern was found, Green-tailed Bristlebill *Bleda eximius*, classified as Vulnerable. Additionally, the Near Threatened Grey Parrot *Psittacus erithacus* was recorded from the Ajenjua Bepo site. Two of the 11 species restricted to the Upper Guinea forests Endemic Bird Area and 91 of the 180 Guinea-Congo forests biome species known from Ghana were observed during the study.

INTRODUCTION

Birds have been proven to be useful indicators of biological diversity of a site, because they occur in most habitats on land throughout the world and are sensitive to environmental change. Their taxonomy and global geographical distribution are relatively well known in comparison to other taxa (ICBP 1992). The conservation status of most species has been reasonably well assessed and is being regularly updated (BirdLife International 2000, 2004). This permits rapid analysis of the results of an ornithological study and the presentation of conservation recommendations. Birds are also among the most charismatic species, which can facilitate the acceptance of the necessity to implement protective measures by policy makers and stakeholders.

As West African forests are rapidly disappearing, the survival of the birds of the Upper Guinea forests is becoming increasingly dependent on ever fewer areas. Despite a number of field studies conducted in the region in recent years (e.g. Demey and Rainey 2004, 2005; Rainey and Asamoah 2005), the avifaunas of the majority of these forests remain inadequately known.

Ajenjua Bepo Forest Reserve theoretically covers an area of 5.69 km^2 of moist semi-deciduous forest and consists of both flat and hilly terrain at c.150-350 m a.s.l. The forest has been severely fragmented by encroaching cultivation of cocoa, banana and cassava, with small patches of the original forest remaining only on the steepest and most rocky hill sides. Even these remnant patches have been degraded, by illegal wood cutting. The forest canopy is open and contains many large gaps, with larger trees reaching up to 40-50 m emerging above a sub-canopy of 10-20 m height. A few small streams occur, but these were entirely dry during our visit.

Mamang River Forest Reserve also consists of moist semi-deciduous forest of similar aspect, but the terrain is mostly flat. However, the area is much larger than Ajenjua Bepo and theoretically covers 53 km^2, although encroaching cultivation is threatening from all sides. The remaining forest nevertheless appears less fragmented than at Ajenjua Bepo. Similarly to that site, the forest canopy is very open and presents numerous large gaps, with emergents reaching up to 40-50 m. In some places, the sub-canopy of 10-20 m height is closed. Dense tangles of lianas are a characteristic feature of this forest. The few small streams were entirely dry at the time of our study.

No ornithological studies had been conducted previously in Ajenjua Bepo or Mamang River.We carried out 11 days of field work, five at Ajenjua Bepo, from 25 through 29 August 2006, and six at Mamang River, from 30 August through 4 September, during which we recorded 137 of the c. 735 bird species now known from Ghana (Appendix 7). Camps were established at N 06° 22' 2.3", W 01° 01' 58.6" and N 06° 15' 0.2", W 01° 02' 25.7". Most of our field work was done in the forest proper, although cultivated areas and degraded habitats were also visited, as these form a substantial part of both sites, especially of the first, and were impossible to avoid.

The weather was mainly overcast with some, usually rather short, sunny spells. Rain was frequent at night and occasionally also during the day, especially at the second site.

METHODS

The principal method used during this study consisted of observing birds by walking slowly along tracks. Notes were taken on both visual observations and bird vocalizations. Some tape-recordings were made for later deposition in sound archives. Field work was carried out from dawn (usually 05:45) until 13:00–14:00, and in the afternoon from 15:00–16:00 until sunset (around 18:15). Some species were recorded opportunistically during the night.

For each field day a list was compiled of all the species that were recorded. Numbers of individuals or flocks were noted, as well as basic information on the habitat in which the birds were observed. As many species had finished breeding (several dependent and independent juveniles were noticed), many birds were not singing and several thus must have remained unnoticed. Therefore, no indices of abundance based on the encounter rate are given, as these could convey an erroneous impression on each species' relative abundance.

For the purposes of standardization, we have followed the nomenclature, taxonomy and sequence of Borrow and Demey (2001, 2004).

RESULTS

Ajenjua Bepo Forest Reserve

At this site, 121 species were recorded; these are listed in Appendix 7, along with threat status, endemism to the Upper Guinea forest block, membership of the Guinea-Congo forests biome assemblage, and habitat. No species of global conservation concern were observed. Only one of the 11 restricted-range species, i.e. species which have a global breeding range of less than 50,000 km^2, that make up the Upper Guinea forests Endemic Bird Area, was found: Sharpe's Apalis *Apalis sharpii*. Of the 180 Guinea-Congo forests biome species now recorded in Ghana (Fishpool and Evans 2001, Stattersfield et al. 1998), 79 were noted during the survey. The presence of Fiery-breasted Bush-shrike *Malaconotus cruentus*, a scarce species in Ghana, is worth mentioning.

Mamang River Forest Reserve

In total, 115 species were recorded here (Appendix 7). One species of global conservation concern was observed: Green-tailed Bristlebill *Bleda eximius*, classified as Vulnerable, indicating that the species faces a high risk of extinction in the medium-term future (BirdLife International 2000, 2004). Two of the 11 restricted-range species that make up the Upper Guinea forests Endemic Bird Area recorded in Ghana were found: Green-tailed Bristlebill and Sharpe's Apalis *Apalis sharpii.* Of the 180 Guinea-Congo forests biome species known from the country (Fishpool and Evans 2001, Stattersfield et al. 1998), 78 were recorded during the study.

Notes on species of particular interest

Status in West Africa from Borrow and Demey (2001) and in Ghana from Grimes (1987) and Ntiamoa-Baidu et al. (2001).

Poicephalus gulielmi Red-fronted Parrot
Recorded daily at both sites, with up to 12 around the camp at Ajenjua Bepo. This species is generally scarce in West Africa.

Bleda eximius Green-tailed Bristlebill
Two singing individuals were recorded at Mamang River; both were with a mixed-species flock. This threatened Upper Guinea endemic is rare in Ghana and reaches the eastern limit of its distribution in Atewa Range Forest Reserve, c.120 km to the east.

Alethe diademata White-tailed (Fire-crested) Alethe
Two juveniles were observed together at Ajenjua Bepo on 29 August.

Apalis sharpii Sharpe's Apalis
This Upper Guinea forests biome endemic was found to be relatively common and vocal in the canopy and sub-canopy, with daily observations of up to two singing individuals at Ajenjua Bepo and up to five at Mamang River.

Muscicapa epulata Little Grey Flycatcher
A single individual catching insects in flight was seen at the forest edge near camp at Ajenjua Bepo. This small species is generally scarce in West Africa.

Parus funereus Dusky Tit
A single, vocal individual was found in a very degraded part of Ajenjua Bepo. It is scarce to rare and local in West Africa.

Malaconotus cruentus Fiery-breasted Bush-shrike
Two single individuals were heard singing at different locations at Ajenjua Bepo. This species is generally rare and local in West Africa; in Ghana it is known from only one Important Bird Area (Atewa).

DISCUSSION

Ajenjua Bepo and Mamang River were found to have genuine forest species, as well as species typical of forest edge, farm bush and cultivation. Although only one species of conservation concern was found, the number of forest-restricted species was still relatively high, especially considering the often poor condition of the forest, in particular at Ajenjua Bepo. An even higher species number could have been reached if the survey had been conducted during a different season, for example in February-March, when more species are vocally active and, additionally, Palearctic migrants are still present.

The very low number of diurnal forest raptors on our list is remarkable. African Goshawks *Accipiter tachiro* were silent and only two were seen hunting at Ajenjua Bepo; African Harrier Hawks *Polyboroides typus* were recorded once at each site, one at the former and two together at the latter.

Only two hornbill species were found: Pied *Tockus fasciatus* (still common, with up to 12 in a day) and White-crested *Tropicranus albocristatus* (up to at least four in a day). The absence of large hornbills and also of Great Blue Turacos *Corythaeola cristata*, both conspicuous species in good forest, are indicative of the condition of the forest and the high hunting pressure.

Although mixed-species flocks were regularly encountered, they were not particularly common and comprised a relatively small number of individuals. Typical members of these flocks included Red-tailed Bristlebill *Bleda syndactylus*, Grey-headed Bristlebill *B. canicapillus*, Western Bearded Greenbul *Criniger barbatus*, Red-tailed Greenbul *C. calurus*, Icterine Greenbul *Phyllastrephus icterinus* (remarkably discreet and not numerous), Green Hylia *Hylia prasina*, Blue-headed Crested Flycatcher *Trochocercus nitens,* Red-bellied Paradise Flycatcher *Terpsiphone rufiventer*, Chestnut Wattle-eye *Dyaphorophyia castanea*, Fraser's Sunbird *Deleornis fraseri*, Blue-throated Brown Sunbird *Cyanomitra cyanolaema*, Black-headed *Oriolus brachyrhynchus* or Black-winged Oriole *O. nigripennis*, Velvet-mantled Drongo *Dicrurus modestus*, and one to three *Malimbus* species (Crested *M. malimbicus*, Blue-billed *M. nitens* and/or Red-headed Malimbe *M. rubricollis*). Other species observed in these flocks comprise Narina's Trogon *Apaloderma narina*, Buff-spotted Woodpecker *Campethera nivosa*, Brown-eared Woodpecker *C. caroli*, Purple-throated Cuckoo-shrike *Campephaga quiscalina*, Blue Cuckoo-shrike *Coracina azurea*, Finsch's Flycatcher Thrush *Stizorhina finschi*, Sharpe's Apalis *Apalis sharpii*, Grey Longbill *Macrosphenus concolor*, Rufous-crowned Eremomela *Eremomela badiceps*, Fraser's Forest Flycatcher *Fraseria ocreata*, Chestnut-capped Flycatcher *Erythrocercus mccallii*, Sabine's Puffback *Dryoscopus sabini*, Red-billed Helmet-shrike *Prionops caniceps*, Grey-headed Negrofinch *Nigrita canicapillus* and Chestnut-breasted Negrofinch *N. bicolor*. No Shining Drongo *Dicrurus atripennis* was recorded.

The generally rare and local Fiery-breasted Bush-shrike *Malaconotus cruentus* was found at Ajenjua Bepo. Other species occurring in the reserves that are rare in Ghana and generally uncommon in their global range include Little Grey Flycatcher *Muscicapa epulata*, Dusky Tit *Parus funereus* and Johanna's Sunbird *Cinnyris johannae*.

CONSERVATION RECOMMENDATIONS

Although neither Ajenjua Bepo nor Mamang River appear to have particularly remarkable birds, they still harbour a significant selection of Guinea-Congo forests biome species. Forests like these are becoming increasingly rare in West Africa. Considering the very fragmented state of Ajenjua Bepo, it appears preferable to concentrate conservation efforts on Mamang River, which is much larger and less fragmented. The conservation of the latter, as it presently is, would be sufficient for the preservation of the globally threathened Green-tailed Bristlebill.

Hunting should be curtailed. Although it currently mainly targets mammals, certain large bird species, such as Crested Guineafowl, Great Blue Turaco and large hornbills, also fall victim to these illegal practices, which could explain their absence.

REFERENCES

BirdLife International. 2000. Threatened Birds of the World. Lynx Edicions and BirdLife International. Barcelona, Spain and Cambridge, UK.

BirdLife International. 2004. Threatened Birds of the World 2004. CD-ROM. BirdLife International. Cambridge, UK.

Borrow, N. and R. Demey. 2001. Birds of Western Africa. Christopher Helm. London.

Borrow, N. and R. Demey. 2004. Field Guide to the Birds of Western Africa. Christopher Helm. London.

Demey, R. and H.J. Rainey. 2004. A preliminary survey of the birds of the Forêt Classée du Pic de Fon. *In*: McCullough, J. (ed.). A biological assessment of the terrestrial ecosystems of the Forêt Classée du Pic de Fon, Simandou Range, Guinea. RAP Bulletin of Biological Assessment 35. Conservation International, Washington, DC. Pp. 63-68.

Demey, R. and H.J. Rainey. 2005 A rapid survey of the birds of Haute Dodo and Cavally Classified Forests. *In*: Alonso, L.E., F. Lauginie and G. Rondeau (eds.). A biological assessment of two classified forests in South-western Côte d'Ivoire. RAP Bulletin of Biological Assessment 34. Conservation International, Washington, DC. Pp. 84–90.

Fishpool, L.D.C. and M.I. Evans (eds.). 2001. Important Bird Areas in Africa and Associated Islands: Priority sites for conservation. Pisces Publications and BirdLife International, Newbury and Cambridge, UK.

Grimes, L.G. 1987. The birds of Ghana. BOU Checklist No. 9. British Ornithologists' Union, London.

ICBP. 1992. Putting biodiversity on the map: priority areas for global conservation. International Council for Bird Preservation. Cambridge, UK.

Ntiamoa-Baidu, Y., E.H. Owusu, D.T. Daramani and A.A. Nuoh. 2001. Ghana. *In:* Fishpool, L.D.C. and M.I. Evans (eds.). Important Bird Areas in Africa and Associated Islands: Priority sites for conservation. Pisces Publications and BirdLife International, Newbury and Cambridge, UK. Pp. 473-480.

Rainey, H.J. and A. Asamoah. 2005. Rapid assessment of the birds of Draw River, Boi-Tano and Krokosua Hills. *In*: McCullough, J., J. Decher and D.G. Kpelle (eds.). A biological assessment of the terrestrial ecosystems of the Draw River, Boi-Tano, Tano Nimiri and Krokosua Hills forest reserves, southwestern Ghana. RAP Bulletin of Biological Assessment 36. Conservation International, Washington, DC. Pp. 50-56.

Stattersfield, A.J, M.J. Crosby, A.J. Long and D.C. Wege. 1998. Endemic Bird Areas of the World: Priorities for Biodiversity Conservation. BirdLife International. Cambridge, UK.