ISSN: 0975-833X

Available online at http://www.journalcra.com

International Journal of Current Research
Vol. 17, Issue, 08, pp.34372-34380, August, 2025
DOI: https://doi.org/10.24941/ijcr.49341.08.2025

INTERNATIONAL JOURNAL OF CURRENT RESEARCH

RESEARCH ARTICLE

FIRST ASSESSMENTS OF BIRD DIVERSITY IN THE MONT KORHOGO CLASSIFIED FOREST, A SITE OF IMPORTANCE FOR BIODIVERSITY CONSERVATION (KORHOGO, CÔTE D'IVOIRE)

[1]GUETONDE Valérie Florence, [2]NIAMIEN Coffi Jean Magloire and [3]KONAN Ekoun Michaël*

[1]PhD student, Department of Animal Biology, Faculty of Biological Sciences, Peleforo GON COULIBALY University, PO Box 1328 Korhogo, Côte d'Ivoire; [2]Associate Professor, Department of Animal Biology, Faculty of Biological Sciences, Peleforo GON COULIBALY University. PO Box 1328 Korhogo, Côte d'Ivoire; [3]Assistant Professor, Department of Animal Biology, Faculty of Biological Sciences, Peleforo GON COULIBALY University. PO Box 1328 Korhogo, Côte d'Ivoire

ARTICLE INFO

Article History:
Received 11th May, 2025
Received in revised form
24st June, 2025
Accepted 19th July, 2025
Published online 30th August, 2025

Keywords:

Mount Korhogo classified forest, Avifauna, Diversity, Structure, Conservation.

***Corresponding author:**
KONAN Ekoun Michaël

ABSTRACT

The Mont Korhogo classified forest, the only forest area located on the outskirts of the city of Korhogo, provides a refuge for wildlife directly threatened by the rapid expansion of the city and the conversion of natural areas into agricultural land. Despite this, there is no data on the animal biodiversity of this site. The bird community of this classified forest, the only protected forest area on the outskirts of the city, was studied for the first time from October 2023 to September 2024 in order to assess the role of the classified forest in the conservation and distribution of wild birds facing intense anthropization of the environment. The point abundance index method based on listening points was used. The results indicate that this community comprises 138 bird species divided into 50 families and ordered into 17 orders. The order Passeriformes (S = 68 species: 49.28%) and the families Accipitridae (S = 11 species; 7.97%) and Nectariniidae (S = 10 species; 7.25%) families were the best represented. Resident species (S = 106 species; 76.81%) and open habitat species (S = 93 species; 67.39%) were in the majority. Twenty-one species were ubiquitous. Three species dominated the population: *Stretopelia vinacea* (Fr = 6.34%), *Euplectes franciscanus* (Fr = 5.57%) and *Lonchura cucullata* (Fr = 8.36%). Among them, Lonchura cucullata was the most abundant species (N = 120 individuals). Preliminary inventories of birds in the Mont Korhogo classified forest revealed a dominance of open habitat species, indicating the existence of anthropogenic pressures that are undermining the ecological balance of this classified forest on the one hand, and on the other hand, the bioindication character of birds as a tool for assessing the conservation status of ecosystems.

Citation: GUETONDE Valérie Florence, NIAMIEN Coffi Jean Magloire and KONAN Ekoun Michaël. 2025. "First assessments of bird diversity in the Mont Korhogo classified forest, a site of importance for biodiversity conservation (Korhogo, Côte d'Ivoire)". *International Journal of Current Research, 17, (08), 34372-34380.*

INTRODUCTION

Birds are of systematic, ecological, health, pharmacological and conservation interest (Issiaka *et al*., 2018; Kafando *et al*., 2023; Gill and Donsker, 2025). In Côte d'Ivoire, birds have been the subject of numerous studies, enabling the avifauna to be estimated at just over 750 species. However, this work on avifauna has mainly been carried out in the southern part of the country, and to a lesser extent in the center, centre-west and north-east. These studies have led to a better understanding of forest birds (Yaokokoré-Béibro, 2001; 2010; Kouadio *et al*., 2014; Yaokokoré-Béibro *et al*., 2015 a; Okon *et al*., 2018, 2019), wetland birds (Konan and Yaokokoré-Béibro, 2015; Zago *et al*., 2024), agroecosystem birds (Konan *et al*., 2015 a; Odoukpé *et al*., 2020; Kouadja *et al*., 2021) and urban birds (Konan *et al*., 2014, 2021; Yaokokoré-Béibro *et al*., 2015 b, c). Furthermore, the few ornithological studies carried out in the north of Côte d'Ivoire, and more specifically in the Korhogo department, have revealed an undeniable potential for avian fauna in view of the preliminary results obtained in wetlands (Niamien *et al*., 2019, 2020), in urban environments (Konan *et al*., 2023) and in agricultural environments (Niamien *et al*., 2019, 2021). On the outskirts of the town of Korhogo lies a classified forest known as the Mont Korhogo forest (MKCF). This environment could be one of the last refuges for forest birds in the Korhogo region, for which no conclusive data are available. What is known is that the galloping expansion of the city today poses a threat to the territorial integrity of this classified forest, as well as to the flora and fauna resources widely exploited by the surrounding rural and urban populations (Andon *et al*., 2018). This effect is most obvious for birds, which are highly sensitive to changes in their environment (Birdlife Internationl, 2018; Pauw *et al*., 2019; Hervé *et al*., 2020; N'Goran *et al*., 2022; Kafando *et al*., 2023). Unfortunately, while this classified forest has been studied in terms of its flora (Koné *et al*., 2007; Yéo *et al*., 2021), the same cannot be said for its fauna, which remains highly underestimated. The wild birds of the MKCF, for example,

have never been studied. As a result, this avifauna is totally unknown. The present study is therefore the first of its kind in the MKCF. It is a contribution to a better understanding of the ecology of birds in the Mont Korhogo classified forest. More specifically, the aim is to monitor the MKCF bird community and determine its structure, with a view to making recommendations for its conservation.

MATERIALS AND METHODS

Study area: The Mount Korhogo classified forest is located on the north-western outskirts of the city, on the Korhogo-Boundiali axis (9°48' and 9°16' N / 5°40' and 6°10' W). In recent years, the Mont Korhogo classified forest has been severely threatened by the expansion of the city. From an initial area of 1,409 hectares when it was created, it has grown to 1,155 hectares today, following various waves of illegal subdivisions (Andon *et al*., 2018). In addition, the MKCF is under heavy pressure from the harvesting of timber for firewood and construction. It is the site of various other human activities likely to exacerbate the pressure on these natural resources. These include cattle transhumance, worship activities, agriculture and plastic pollution (Andon *et al*., 2018). The MKCF, like the city of Korhogo, is under the influence of a transitional tropical-type climate with two seasons: a rainy season, from May to October, and a dry season, from November to April. Average annual rainfall is around 1,200 mm, with an annual temperature of 27°C (Andon, 2021) (Figure 1).

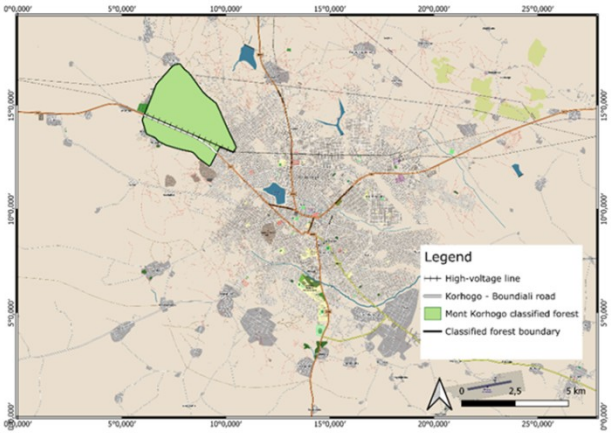

Figure 1. Location of the Mont Korhogo classified forest

Figure 2. Photographs of some of the habitat facies sampled in the Mont Korhogo classified forest

Within this forest, 04 plots representative of different landscapes were identified (Figure 2). Two plots are in contact with the Gon and Cocody districts, 01 plot in the heart of the classified forest and 01 plot in the lowland (cultivated area). Plot 1 is characterized by Teak *Tectona grandis* Linné. (Verbenaceae) and Eucalyptus (g. *Eucalyptus* (Myrtaceae) and natural forest formations. It is located in the heart of the forest and is considered the least anthropized. Plot 2 is in contact with the Cocody district and close to the asphalt road that crosses the MKCF; the forest formations encountered are Teak (*Tectona grandis* Linné. (Verbenaceae)) and Eucalyptus (g. *Eucalyptus* (Myrtaceae)). The natural forest formation is shrubby. It is crossed by some fifteen tracks and also contains numerous ritual sites and wild dumps. Plot 3 is an area with a diversity of habitats (gallery forests, temporary ponds, an agricultural plain). It is also home to fruit trees such as mango (*Mangifera indica* Linné. (Anacardiaceae)). Plot 4, in contact with the Gon district, is separated from plot 2 by the national road. Like plot 2, it is a site of rituals and wild dumps. It features natural forest formations with a tree stratum varying in height from 8 to 20 m. There are also plantations of Gmelina (*Gmelina arborea* Roxb. Ex Sm. (Verbenaceae) and teak (*Tectona grandis* Linné. (Verbenaceae)).

Collecting data: Data collection took place from October 2023 to September 2024. Birds were surveyed using the Indices Ponctuels d'Abondance (IPA) method (Blondel et al., 1970). In each plot, five listening points were set up using a GPS (GARMIN etrex 10), for a total of twenty listening points over the MKCF area. These listening points were at least 300 m apart. Visits were made in the mornings, from 06:00 to 10:00, and in the afternoons, from 15:30 to 18:00. These time slots correspond to peak activity periods for the birds (Yaokokoré-Béibro, 2001). Each of the four habitats was visited once a month, so that in one month, all habitats were sampled. This makes a total of 48 visits over the 12 months of sampling. In each habitat, each listening point was visited for 20 minutes, during which the birds were observed with binoculars (BRESSER 10x42) within a radius of 100 meters (Blondel *et al*., 1970). Five munites were required to reach two consecutive points. Species were identified using the West African bird identification guide (Borrow and Demey, 2008), for birds seen. In addition, the calls and songs of unknown bird species were recorded with a dictaphone (SONY IC RECORDER ICD-PX470) and later recognized using Chappuis' discography (Chappuis, 2000). A camera (Canon EOS 2000D) was used to capture some specimens for later identification. Birds observed within a 100 m radius were counted to determine the index of abundance (IPA). Species observed beyond 100 m were considered for overall species richness (Konan et al., 2015 b).

Data analysis: Data collected throughout the MKCF were used to determine the species richness (S = Σ species) of the environment; the relative frequency of abundance (Fr = (ni/N) x 100); where ni: abundance of species i and N: overall abundance) was calculated to determine abundance indices (AI): dominant species (D) if Fr ≥ 5%, regular species (Re) if 1% ≤ Fr < 5%, rare species (Ra) if 0.2% ≤ Fr < 1% and accidental species (Ac) if Fr < 0.2% (Thiollay, 1986). The data collected were also used to determine the frequency of occurrence (Fo = (Pi/P) x 100; with Pi: number of surveys containing species i and P: total number of surveys) (Dajoz, 1985), which makes it possible to determine five categories of occurrence: ubiquitous species (Fo = 100%), constant species (75% ≤ Fo < 100%), regular species (50% ≤ Fo < 75%), occasional species known as accessory species (25% ≤ Fo < 50%), infrequent species or accidental species (Fo < 25%)

(Dajoz, 1985). Populations were characterized on the basis of species biogeographical origin (Borrow and Demey, 2008), preferred habitat (Bennun *et al*., 1996) and conservation status (IUCN, 2025). The systematic list of bird species and nomenclature are those of Gill *et al*. (2025).

RESULTS

Overall specific composition: Surveys in the MKCF revealed 138 bird species divided into 50 families of 17 orders, for a total of 1,436 individuals (Table 1). The Passeriformes order is the most important with 68 species (49.28%). Accipitridae (S = 11 species: 7.97%) and Nectariniidae (S = 10 species: 7.25%) are the best represented (Table I). The order Passeriformes (N = 839 individuals: 58.43%) and the family Colombidae (N = 209 individuals: 14.36%) are the most abundant.

Stand structure

Species occurrence: Twenty-one species, comprising 659 birds, are ubiquitous (100%). They are *Streptopelia semitorquata*, *Streptopelia vinacea*, *Crinifer piscator*, *Tauraco violaceus*, *Vanellus senegallus*, *Kaupifalco monogrammicus*, *Locephoros nasutus*, *Pogoniulus chrysoconus*, *Malaconotus blanchoti*, *Dryoscopus gambensis*, *Laniarus barbarus*, *Dicrurus adsimilis*, *Terpsiphone rufiventer*, *Corvus albus*, *Camaroptera brachyura*, *Pycnonotus barbatus*, *Turdus pelios*, *Chalcomitra senegalensis*, *Uraeginthus bengalus*, and *Spermestes cucullata*. The remaining species are divided into 15 constant species (165 individuals), 27 regular species (335 individuals), 23 accessory species (106 individuals) and 52 accidental species (171 individuals) (Table 1).

Preferred habitats: Openland species dominate, with 93 species (67.36%) and 1161 individuals (80.85%). These are followed by forest species (S = 29 species: 21.01%), which together number 176 individuals (12.26%), and wetland species (S = 16 species: 11.59%) (Table 1; Figure 3). Figure 4 shows some of the bird species found in the different habitats of the classified forest.

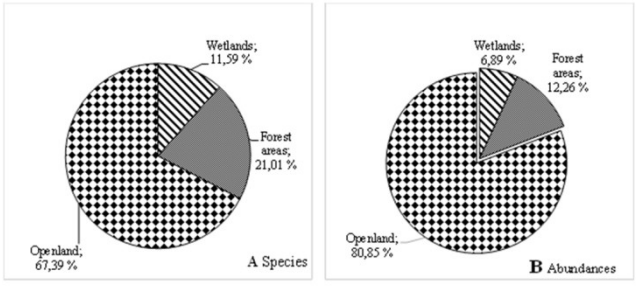

Figure 3. Proportions of birds in the Mont Korhogo classified forest by preferred habitat, by species and abundance

Origins of birds in the classified forest: In the Mont Korhogo classified forest, resident species are in the majority, with 106 species (76.81%). This is followed by intra-African migratory species (S=10 species: 7.24%) and finally Palaearctic migratory species (S=5 species: 3.62%). In addition, we note the presence of dual-status species: 14 species that are both resident and intra-African migrants (10.14%) and three species that are both resident and Palearctic migrants (2.17%) (Table 1).

Conservation status: There are no endangered birds in the MKCF. All the species inventoried are therefore of Least concern (LC) (Table I).

Bird abundance categories: According to abundance indices, the dominant bird species in the stand are *Streptopelia vinacea* (Fr = 6.34%), *Euplectes franciscanus* (Fr = 5.37%) and *Spermestes cucullata* (Fr = 8.36%). Of these, *Spermestes cucullata* is the most abundant species (120 individuals). The remaining species can be categorized as 26 regular, 62 rare and 47 accidental (Table 1).

DISCUSSION

Avifauna monitoring carried out within the Mont Korhogo classified forest has resulted in the inventory of 138 bird species. This high species richness could be explained by the diversity of habitats and abundance of food resources offered by the MKCF. In fact, the MKCF is the largest forest area in the city of Korhogo, apart from the 12 sacred forests scattered throughout the city (Andon, 2021). Due to its location between urban and rural environments, and the mosaic of habitats that make it up, it offers resting and nesting sites for several bird species. Indeed, the plurality of habitats and abundance of food resources would favor the presence and cohabitation of bird species in different ecological niches (Platel and Ravel, 2019; Niamien et al., 2019; Konan et al., 2021; N'Goran et al., 2022). Compared with data from work carried out in the Korhogo department, notably in the town of Korhogo (Konan et al., 2023), in an urban wetland (Niamien et al., 2024) and in a rural wetland (Ehouman et al., 2023), the MKCF has a more diverse avifauna and is home to 28 bird species newly observed in the said department. In fact, the specific richness in bird fauna of the Korhogo university campus, the Koko dam lake and the Sologo dam lake is 110, 77 and 120 bird species respectively, compared with 138 species for the MKCF. Compared to these studies, the newly observed species are *Apus apus*, *Clamator glandarius*, *Botaurus sturmii*, *Otus senegalensis*, *Aviceda cuculoides*, *Circaetus cinerascens*, *Milvus eagyptius*, *Buteo auguralis*, *Merops apiaster*, *Merops hirundineus*, *Halcyon leucocephala*, *Lybius vieilloti*, *Indicator indicator*, *Batis senegalensis*, *Chlorophoneus multicolor*, *Laniarius aethiopicus*, *Anthoscopus parvulus*, *Cisticola juncidis*, *Cinnyricinclus leucogaster*, *Ficedula hypoleuca*, *Anthreptes longuemarei*, *Chalcomitra adelberti*, *Cinnyris pulchellus*, *Cinnyris venustus*, *Quelea erythrops*, *Euplectes macroura*, *Anaplectes rubriceps* et *Vidua camerunensis*. These are species that are more sensitive to the pressures of urbanization, and therefore specific to natural environments, however degraded. In addition, 62 species observed on all three sites were not observed in the Mont Korhogo classified forest. This brings the list of birds in the Korhogo department to 200 species.

This number is lower than the 198 species inventoried by Lachenaud (2006) in the Banco National Park and Anguédédou Classified Forest, Côte d'Ivoire. However, this species richness is higher than the 53 species recorded in the forest galleries of the Monts classified forest in Benin (Yabi *et al*., 2015) and the 93 species noted by Konan et al. (2015a) in the Téné classified forest (central-western Côte d'Ivoire). This difference would be due to the size of the sites sampled, the duration and intensity of sampling and anthropogenic pressures. Indeed, the Banco National Park (3200 ha) and the Anguédédou classified forest (5700 ha) have larger areas than

Table 1: Qualitative and quantitative data on bird species observed in the Mont Korhogo classified forest from October 2023 to September 2024

Orders/Families/Species	Biogeo	Hab	IUCN	PAI	RF (%)	AI	OF (%)	OS
GALLIFORMES								
Odontophoridae								
Ptilopachus petrosus (J. F. Gmelin, 1789)	R	f.	LC	12	0,84	Ra	75	Constant
Phasianidae								
Pternistis bicalcaratus (Linné, 1766)	R	f.	LC	1	0,07	Ac	16,67	Accidental
ANSERIFORMES								
Anatidae								
Dendrocygna viduata (Linné, 1766)	R/M	E	LC	16	1,11	Re	33,33	Accessory
Plectropterus gambensis (Linné, 1766)	R	E	LC	4	0,28	Ra	16,67	Accidental
APODIFORMES								
Apodidae								
Cypsiurus parvus (Lichtenstein, 1823)	R	f.	LC	2	0,14	Ac	16,67	Accidental
Apus apus (Linné, 1758)	P	f.	LC	37	2,58	Ra	16,67	Accidental
MUSOPHAGIFORMES								
Musophagidae								
Crinifer piscator (Boddaert, 1783)	R	f.	LC	12	0,84	Ra	100	Omnipresent
Tauraco violaceus (Isert, 1788)	R	f.	LC	21	1,46	Re	100	Omnipresent
CUCULIFORMES								
Cuculidae								
Centropus senegalensis (Linné, 1766)	R	f.	LC	3	0,21	Ra	58,33	Regular
Clamator levaillantii (Swainson, 1829)	M	f.	LC	2	0,14	Ac	75,00	Constant
Clamator glandarius (Linné, 1758)	M/R	f.	LC	2	0,14	Ac	16,67	Accidental
Chrysococcyx klaas (Stephens, 1815)	R	F	LC	6	0,42	Ra	58,33	Regular
Chrysococcyx caprius (Boddaert, 1783)	M/R	f.	LC	2	0,14	Ac	16,67	Accidental
Cuculus solitarius Stephens, 1815	R/M	F	LC	13	0,91	Ra	58,33	Regular
Cuculus gularis Stephens, 1815	M	f.	LC	7	0,49	Ra	16,67	Accidental
COLUMBIFORMES								
Columbidae								
Columba guinea Linné, 1758	R	f.	LC	17	1,18	Re	58,33	Regular
Streptopelia semitorquata (Ruppell, 1837)	R	f.	LC	29	2,02	Re	100	Omnipresent
Streptopelia vinacea (Gmelin, 1789)	R	f.	LC	91	6,34	D	100	Omnipresent
Spilopelia senegalensis (Linné, 1766)	R	f.	LC	21	1,46	Re	88,33	Constant
Turtur abyssinicus (Sharpe, 1902)	R	F	LC	31	2,16	Re	100	Omnipresent
Turtur afer (Linné, 1766)	R	f.	LC	2	0,14	Ac	50,00	Regular
Turtur tympanistria (Temminck, 1809)	R	F	LC	5	0,35	Re	8,33	Accidental
Treron calvus (Temminck, 1811)	R	F	LC	13	0,91	Re	66,67	Regular
CHARADRIIFORMES								
Burhinidae								
Burhinus senegalensis (Swainson, 1837)	R	E	LC	4	0,28	Ra	41,67	Accessory
Charadriidae								
Vanellus senegallus (Linné, 1766)	R/M	E	LC	20	1,39	Re	100	Omnipresent
Jacanidae								
Actophilornis africanus (Gmelin, JF, 1789)	R	E	LC	4	0,28	Ra	58,33	Regular
Scolopacidae								
Actitis hypoleucos (Linné, 1758)	P	E	LC	1	0,07	Ac	25,00	Accessory
SULIFORMES								
Phalacrocoracidae								
Microcarbo africanus (Gmelin, JF, 1789)	R	E	LC	1	0,07	Ac	8,333	Accidental
PELECANIFORMES								
Ardeidae								
Botaurus sturmii (Wagler, 1827)	M	E	LC	5	0,35	Ra	16,67	Accidental
Nycticorax nycticorax (Linné, 1758)	R/P	E	LC	2	0,14	Ac	8,33	Accidental
Butorides striata (Linné, 1758)	R	E	LC	7	0,49	Ra	58,33	Regular
Ardeola ralloides (Scopoli, 1769)	R/M	E	LC	1	0,07	Ac	8,33	Accidental
Ardea brachyrhyncha (Brehm, AE, 1854)	R/M	E	LC	3	0,21	Ra	25,00	Accessory
Ardea ibis Linné, 1758	R/M	E	LC	21	1,46	Re	66,67	Regular
Ardea cinerea Linné, 1758	R/P	E	LC	2	0,14	Ac	41,67	Accessory
Ardea melanocephala Children & Vigors, 1826	R/M	E	LC	3	0,21	Ra	16,67	Accidental
Scopidae								
Scopus umbretta Gmelin, JF, 1789	R	E	LC	5	0,35	Ra	83,33	Constant
ACCIPITRIFORMES								
Accipitridae								
Elanus caeruleus (Desfontaines, 1789)	R	f.	LC	1	0,07	Ac	8,33	Accidental
Aviceda cuculoides Swainson, 1837	R	F	LC	1	0,07	Ac	16,67	Accidental
Circaetus cinerascens Muller, JW, 1851	R	F	LC	1	0,07	Ac	16,67	Accidental
Micronisus gabar (Daudin, 1800)	R	f.	LC	2	0,14	Ac	16,67	Accidental
Melierax metabates Heuglin, 1861	R	f.	LC	1	0,07	Ac	33,33	Accessory

Continue …..

Kaupifalco monogrammicus (Temminck, 1824)	R	f.	LC	5	0,35	Ra	100	Omnipresent
Tachyspiza badia (Gmelin, JF, 1788)	R/M	F	LC	3	0,21	Ra	91,67	Constant
Accipiter ovampensis Gurney, JH Sr, 1875	M	F	LC	3	0,21	Ra	41,67	Accessory
Circus aeruginosus (Linné, 1758)	P	f.	LC	1	0,07	Ac	25,00	Accessory
Milvus eagyptius (Gmelin, JF, 1788)	R	f.		8	0,56	Ra	75,00	Constant
Buteo auguralis Salvadori, 1866	R/M	F	LC	1	0,07	Ac	8,33	Accidental
Strigiformes								
Strigidae								
Otus senegalensis (Swainson, 1837)	R	f.	LC	2	0,14	Ac	16,67	Accidental
Bucerotiformes								
Bucerotidae								
Tockus erythrorhynchus (Temminck, 1823)	R	f.	LC	6	0,42	Ra	41,67	Accessory
Lophoceros semifasciatus (Hartlaub, 1855)	R	F	LC	2	0,14	Ac	8,33	Accidental
Lophoceros nasutus (Linné, 1766)	R	f.	LC	35	2,44	Re	100	Omnipresent
Coraciiformes								
Coraciidae								
Coracias naevius Daudin, 1800	R/M	f.	LC	2	0,14	Ac	16,67	Accidental
Coracias abyssinicus Hermann, 1783	M	f.	LC	4	0,28	Ra	58,33	Regular
Coracias cyanogaster Cuvier, 1816	R	f.	LC	12	0,84	Ra	91,67	Constant
Alcedinidae								
Halcyon leucocephala (Muller, PLS, 1776)	M	f.	LC	9	0,63	Ra	50,00	Regular
Halcyon malimbica (Shaw, 1812)	R	F	LC	1	0,07	Ac	50,00	Regular
Ispidina picta (Boddaert, 1783)	R/M	f.	LC	7	0,49	Ra	66,67	Regular
Corythornis cristatus (Pallas, 1764)	R	f.	LC	1	0,07	Ac	16,67	Accidental
Meropidae								
Merops hirundineus Lichtenstein, AAH, 1793	R/M	f.	LC	21	1,46	Re	41,67	Accessory
Merops apiaster Linné, 1758	P	f.	LC	3	0,21	Ra	8,33	Accidental
Piciformes								
Lybiidae								
Pogoniulus chrysoconus (Temminck, 1832)	R	f.	LC	16	1,11	Re	100,00	Omnipresent
Lybius vieilloti (Leach, 1815)	R	f.	LC	5	0,35	Ra	83,33	Constant
Pogonornis dubius (Gmelin, JF, 1788)	R	f.	LC	1	0,07	Ac	16,67	Accidental
Indicatoridae								
Indicator indicator (Sparrman, 1777)	R	f.	LC	1	0,07	Ac	33,33	Accessory
Falconiformes								
Falconidae								
Falco tinnunculus Linné, 1758	R/P	f.	LC	2	0,14	Ac	16,67	Accidental
Falco ardosiaceus Vieillot, 1823	R	f.	LC	2	0,14	Ac	75,00	Constant
Falco biarmicus Temminck, 1825	R	f.	LC	3	0,21	Ra	33,33	Accessory
Psittaciformes								
Psittacidae								
Poicephalus senegalus (Linné, 1766)	R	f.	LC	5	0,35	Ra	41,67	Accessory
Psittacula krameri (Scopoli, 1769)	R	f.	LC	2	0,14	Ac	8,33	Accidental
Passeriformes								
Platysteiridae								
Batis senegalensis (Linné, 1766)	R	F	LC	3	0,21	Ra	25,00	Accessory
Platysteira cyanea (Muller, PLS, 1776)	R	F	LC	8	0,56	Ra	83,33	Constant
Malaconotidae								
Malaconotus blanchoti Stephens, 1826	R	f.	LC	9	0,63	Ra	100,00	Omnipresent
Chlorophoneus multicolor (Gray, GR, 1845)	R	F	LC	1	0,07	Ac	8,33	Accidental
Tchagra senegalus (Linné, 1766)	R	f.	LC	4	0,28	Ra	83,33	Constant
Dryoscopus gambensis (Lichtenstein, MHC, 1823)	R	F	LC	10	0,70	Ra	100,00	Omnipresent
Laniarius aethiopicus (J. F. Gmelin, JF, 1788)	R	f.	LC	1	0,07	Ac	8,33	Accidental
Laniarius barbarus (Linné, 1766)	R	f.	LC	19	1,32	Re	100,00	Omnipresent
Vangidae								
Prionops plumatus (Shaw, 1809)	R	f.	LC	25	1,74	Re	91,67	Constant
Oriolidae								
Oriolus auratus Vieillot, 1817	M	f.	LC	16	1,11	Re	91,67	Constant
Dicruridae								
Dicrurus adsimilis (Bechstein, 1794)	R	F	LC	12	0,84	Ra	100,00	Omnipresent
Monarchidae								
Terpsiphone rufiventer (Swainson, 1837)	R	F	LC	26	1,81	Re	100,00	Omnipresent
Laniidae								
Lanius corvinus (Shaw, 1809)	R	f.	LC	7	0,49	Ra	58,33	Regular
Corvidae								
Ptilostomus afer (Linné, 1766)	R	f.	LC	2	0,14	Ac	16,67	Accidental
Corvus albus Muller, PLS, 1776	R	f.	LC	13	0,91	Ra	100,00	Omnipresent
Stenostiridae								
Elminia longicauda (Swainson, 1838)	R	F	LC	1	0,07	Ac	8,33	Accidental
Remizidae								
Anthoscopus parvulus (Heuglin, 1864)	R	f.	LC	1	0,07	Ac	8,33	Accidental
Alaudidae								

Continue ….

Galerida modesta Heuglin, 1864	R	f.	LC	6	0,42	Ra	75,00	Constant
Pycnonotidae								
Atimastillas flavicollis (Swainson, 1837)	R	F	LC	4	0,28	Ra	66,67	Regular
Chlorocichla simplex (Hartlaub, 1855)	R	F	LC	1	0,07	Ac	16,67	Accidental
Pycnonotus barbatus (Desfontaines, 1789)	R	f.	LC	71	4,94	Re	100,00	Omnipresent
Hirundinidae								
Hirundo lucida Hartlaub, 1858	R	f.	LC	4	0,28	Ra	16,67	Accidental
Cisticolidae								
Cisticola cantans (Heuglin, 1869)	R	f.	LC	3	0,21	Ra	41,67	Accessory
Cisticola brachypterus (Sharpe, 1870)	R	f.	LC	1	0,07	Ac	8,33	Accidental
Cisticola juncidis (Rafinesque, 1810)	R	f.	LC	1	0,07	AC	8,33	Accidental
Prinia subflava (Gmelin, JF, 1789)	R	f.	LC	3	0,21	Ra	50,00	Regular
Camaroptera brachyura (Vieillot, 1820)	R	f.	LC	20	1,39	Re	100,00	Omnipresent
Eremomela pusilla Hartlaub, 1857	R	f.	LC	11	0,77	Ra	66,67	Regular
Zosteropidae								
Zosterops senegalensis Bonaparte, 1850	R	f.	LC	4	0,28	Ra	8,33	Accidental
Leiothrichidae								
Turdoides plebejus (Cretzschmar, 1828)	R	f.	LC	21	1,46	Re	75,00	Regular
Turdoides reinwardtii (Swainson, 1831)	R	f.	LC	3	0,21	Ra	16,67	Accidental
Sturnidae								
Lamprotornis purpureus (Muller, PLS, 1776)	R	f.	LC	15	1,04	Re	16,67	Accidental
Lamprotornis caudatus (Muller, PLS, 1776)	R	f.	LC	2	0,14	Ac	8,33	Accidental
Cinnyricinclus leucogaster (Boddaert, 1783)	M	f.	LC	4	0,28	Ra	8,33	Accidental
Turdidae								
Turdus pelios Bonaparte, 1850	R	f.	LC	21	1,46	Re	100,00	Omnipresent
Muscicapidae								
Melaenornis edolioides (Swainson, 1837)	R	f.	LC	4	0,28	Ra	25,00	Accessory
Cossypha albicapillus (Vieillot, 1818)	R	f.	LC	1	0,07	Ac	25,00	Accessory
Cossypha niveicapilla (Lafresnaye, 1838)	R	F	LC	9	0,63	Ra	58,33	Regular
Ficedula hypoleuca (Pallas, 1764)	P	F	LC	4	0,28	Ra	25,00	Accessory
Nectariniidae								
Anthreptes longuemarei (Lesson, RP, 1831)	R	f.	LC	2	0,14	Ac	33,33	Accessory
Hedydipna collaris (Vieillot, 1819)	R	F	LC	2	0,14	Ac	8,33	Accidental
Hedydipna platura (Vieillot, 1819)	M	F	LC	2	0,14	Ac	8,33	Accidental
Cyanomitra verticalis (Latham, 1790)	R	F	LC	2	0,14	Ac	8,33	Accidental
Chalcomitra adelberti (Gervais, 1834)	R	F	LC	1	0,07	Ac	8,33	Accidental
Chalcomitra senegalensis (Linné, 1766)	R	f.	LC	39	2,72	Re	100,00	Omnipresent
Cinnyris pulchellus (Linné, 1766)	R	F	LC	6	0,42	Ra	25,00	Accessory
Cinnyris coccinigastrus (Latham, 1801)	R	f.	LC	8	0,56	Ra	75,00	Regular
Cinnyris venustus (Shaw, 1799)	R	f.	LC	35	2,44	Re	75,00	Regular
Cinnyris cupreus (Shaw, 1812)	R	f.	LC	5	0,35	Ra	33,33	Accessory
Passeridae								
Gymnoris dentata (Sundevall, 1850)	R	f.	LC	13	0,91	Ra	58,33	Regular
Passer griseus (Vieillot, 1817)	R	f.	LC	11	0,77	Ra	16,67	Accidental
Ploceidae								
Ploceus heuglini Reichenow, 1886	R	f.	LC	3	0,21	Ra	50,00	Regular
Ploceus cucullatus (Muller, PLS, 1776)	R	f.	LC	36	2,51	Re	75,00	Constant
Anaplectes rubriceps (Sundevall, 1850)	R	F	LC	4	0,21	Ra	8,33	Accidental
Quelea erythrops (Hartlaub, 1848)	M	f.	LC	3	0,21	Ra	8,33	Accidental
Euplectes afer (Gmelin, JF, 1789)	R	f.	LC	2	0,14	Ac	8,33	Accidental
Euplectes franciscanus (Isert, 1789)	R	f.	LC	80	5,57	D	66,67	Regular
Euplectes macroura (Gmelin, JF, 1789)	R	f.	LC	1	0,07	Ac	8,33	Accidental
Estrildidae								
Spermestes cucullata Swainson, 1837	R	f.	LC	120	8,36	D	100	Omnipresent
Glaucestrilda caerulescens (Vieillot, 1817)	R	f.	LC	3	0,21	Ra	33,33	Accessory
Estrilda melpoda (Vieillot, 1817)	R	f.	LC	6	0,42	Ra	16,67	Accidental
Uraeginthus bengalus (Linné, 1766)	R	f.	LC	39	2,72	Re	100,00	Omnipresent
Lagonosticta senegala (Linné, 1766)	R	f.	LC	27	1,88	Re	66,67	Regular
Viduidae								
Vidua chalybeata (Muller, PLS, 1776)	R	f.	LC	2	0,14	Ac	8,33	Accidental
Vidua camerunensis (Grote, 1922)	R	f.	LC	1	0,07	Ac	8,33	Accidental
Vidua macroura (Pallas, 1764)	R	f.	LC	8	0,56	Ra	41,67	Accessory
Motacillidae								
Anthus leucophrys Vieillot, 1818	R	f.	LC	4	0,28	Ra	66,67	Regular
Fringillidae								
Crithagra mozambica (Müller, PLS, 1776)	R	f.	LC	3	0,21	Ra	50,00	Regular

Biogeo : biogeographical origins; Hab : Preferred habitat; PAI : point index of abundance; RF : Relative frequency; AI : abundance index; OF : Occurrence frequency; OS : occurrence status; R : Resident ; M : Intra-African migrant ; P : Palearctic migrant; E : Wetlands; F : Forest areas; f : Various open environments; LC : Least concern.

Figure 4. Some bird species obseved in the Mont Korhogo classified forest

the Mont Korhogo classified forest. In addition, the duration of the study was four years compared with one year in the case of the present study. Although the Téné classified forest covers an area of 30,000 ha, the three-month sampling period could be at the root of this low species richness. Concerning the forest galleries of the Mont du Benin classified forest (272804 ha), the low species richness could be linked to anthropic pressures, responsible for the loss of avifaunal diversity (Konan *et al*., 2014; Ahmad and Bhat, 2017; Hervé *et al*., 2020; N'Goran *et al*., 2022). The best represented families are Accipitridae and Nectariniidae. As far as the Accipitridae are concerned, this dominance can be explained by the existence of open environments suitable for hunting, prey and nesting sites in this classified forest. Indeed, raptors are associated with any environment (forest, wetland, cultivated area, plain, built-up area), which is used as a hunting and nesting territory These results are similar to those of Odoukpé *et al*. (2014), who highlighted the diversified nature of this family. In the case of the Nectariniidae, their importance can be explained by the presence of numerous flowering trees such as Gmelina arborea, whose nectar, an essential part of their diet, attracts the bird species of this family. The omnipresence of these species can be explained by the fact that this ecosystem, made up of several habitats (forest, wetland, cultivated area, open field, built-up area), is favorable to these bird species. In fact, these environments offer them ideal ecological niches and abundant food resources, favoring their retention in this classified forest. The same observation has been made in the Monts forest galleries in Benin (Yabi *et al*., 2021). The bird population was dominated by open habitat species. The presence of a large number of openland species bears witness to the degraded nature of the MKCF. In fact, this classified forest is a site heavily impacted by urbanization,

overharvesting of ligneous species, transhumance and cattle roaming, fragmentation by numerous tracks and seasonal bush fires. All these effects combine to have a negative impact on vegetation structure and the size of woody plants, favoring openland birds to the detriment of forest species. The preponderance of open habitat species in a forest environment, where forest species should be dominant, would therefore be an indicator of the high degree of anthropization of the Mont Korhogo classified forest. The same observation has been made in the Banco National Park (Kouadio *et al*., 2014) and in forest galleries in Benin (Yabi *et al*., 2021). In addition to being home to a large bird community, the MKCF is also of interest because it is home to 15 exclusively migratory species and 17 species whose populations are also migratory. This makes the Mont Korhogo classified forest a site of interest for bird conservation in an increasingly urbanized environment.

CONCLUSION

The preliminary avifaunal survey carried out in the Mont Korhogo classified forest resulted in the inventory of 138 bird species, divided into 50 families and ordered into 17 orders, 28 of which were newly observed in the Korhogo department. Overall, the order Passeriformes and the families Accipitridae and Nectariniidae were the best represented. Twenty-one species are omnipresent in the stand. Among them, *Spermestes cucullata* was the most abundant species. The dominance of open environments bird species in the stand of the Mont Korhogo classified forest has highlighted the impact of anthropic pressures on the only relatively large peri-urban forest relic in the Korhogo department. With the help of the structure in charge of its management (SODEFOR) and local populations, awareness-raising and preservation actions are now needed to achieve sustainable management of this heritage.

Acknowledgements

We would like to thank the Société de Développement des Forêts (SODEFOR) for allowing us to carry out this study in the forest under its management. Finally, we would like to thank all those who helped us collect field data. They are YEO N'Gan-nan and YAO Kouadio Jean.

Competing interests: None declared.

Funding: This study received financial support from the African Bird Club.

REFERENCES

Ahmad, MA. and Bhat IA. 2017. Bird abundance of a flood plain wetland of Kashmir Himalayas. *Int. j. zool. stud*. 2(1): 10-13.

Andon, NS. 2021. Perception, préférences et souhaits des populations sur l'importance de l'arbre dans le paysage urbain et périurbain de la ville de Korhogo. *Rev. Géogr. Univ. Ouagadougou*. 10(2): 253-276.

Andon, NS., Konan, KH., Alla DA. et Djah AG. 2018. État des lieux d'une forêt protégée périurbaine en région de savane de 1998 à 2018 : cas de la forêt classée du Mont Korhogo au nord de la Côte d'Ivoire. *Rev. Lab. Sci. Soc. Org*. 1(5): 221-247.

Bennun, L., Dranzoa C. et Pomeroy D. 1996. Les oiseaux forestiers du Kenya et de l'Ouganda. *J. hist. Nat. Afr. Est*, 85(1): 23-48.

Blondel J., Ferry C. et Frochot B. 1970. La méthode des indices ponctuels d'abondance (IPA) pour des relevés d'avifaune par station d'écoute. *Alauda*, 38: 55-71

Borrow, N., and Demey R. Guide des oiseaux de l'Afrique de l'Ouest. Delachaux et Niestlé S.A. Paris. 2008.

Chappuis, C. *Oiseaux d'Afrique*, *15 CDs*. Société d'étude Ornithologique. 2000.

Dajoz, R. *Précis d'écologie*. Dunod, Paris. 1985.

Ehouman, BF., Niamien, CJM. et Konan, EM. 2023. Premières Données Sur la Communauté des Oiseaux du Lac de Barrage de Sologo, Département de Korhogo, Côte d'Ivoire. *Eur. Sci. J.* 19(27): 18-35. https://doi.org/10.19044/esj.2023.v19n27p18

Gill, F., Donsker, D. and Rasmussen, P. *IOC World Bird List (v 12.1).* 2025. DOI : 10.14344/IOC.ML.12.1

Hervé, D., Randriambanona, H. Ravonjimalala HR., Ramanankierana, H. Rasoanaivo, NS., Baohanta, R. et Carrière, S.M. 2020. Perceptions des fragments forestiers par les Habitants des forêts tropicales humides malgaches. *B. For. Trop.* 345: 43-62. Doi:10.19182/bft2020.345.a31929

Issiaka, Y., Hassane Hamani, S. Abdourahamane Illiassou, S. et Awaiss, A. 2018. Distribution et diversité de la faune aviaire de la ville de Niamey et de sa principale zone humide, le fleuve Niger. *Int. J. Biol. Chem. Sci. 12*(6): 2626-2643. https://dx.doi.org/10.4314/ijbcs.v12i6.13

Kafando, WAC., Zomboudré, G. et Hien, M. 2023. Productivité du sorgho et fertilité des sols dans un système agroforestier à base de Diospyros mespiliformis Hochst. ex A. Rich., Balanites aegyptiaca (L.) Del. et Piliostigma reticulatum (D.C.) Hochst. dans la zone Soudano-sahélienne du Burkina Faso. *J. Appl. Biosci.* 184: 19296–19310. https://doi.org/10.35759/JABs.183.5

Konan, EM., Yaokokoré-Béibro, KH. Kouadio, KP. Odoukpé, KSG. et Koué, BTM. 2015a. Avifaune d'un milieu forestier perturbé par la cacaoculture au centre-ouest de la Côte d'Ivoire : la Forêt Classée de la Téné. *Agron. Afr*. 27(3): 189-200.

Konan, EM., Guétondé, VF. Niamien, CJM. et Yaokokoré-Béibro, KH. 2021. Variation within the Bird Community of a Rehabilitated Urban Environment, Case of the Félix Houphouët-Boigny University Campus (Côte d'Ivoire). *Asian J. Appl. Sci*. 9(4): 275-284.

Konan, EM., Niamien, CJM., Guétondé, VF., Approu, SO. et Yaokokoré-Béibro, KH. 2023. Données préliminaires sur les oiseaux du campus universitaire Peleforo Gon Coulibaly de Korhogo, dans le septentrion de la Côte d'Ivoire. *Eur. Sci. J.* 19(24): 161-184. https://doi.org/10.19044/esj.2023.v19n24p161

Konan, EM., Yaokokoré-Béibro, KH., Odoukpé, KSG. et Kouadja, KES. 2014. Avifaune de la ville de Yamoussoukro, centre de la Côte d'Ivoire. *Eur. Sci. J.* 10: 63-75.

Konan, EM. et Yaokokoré-Béibro, KH. 2015. Variation temporelle du peuplement aviaire des écosystèmes lacustres de la ville de Yamoussoukro, centre de la Côte d'Ivoire. *Int. J. Biol. Chem. Sci.* 9(6): 2566-2581. DOI : http://dx.doi.org/10.4314/ijbcs.v9i6.5

Konan, EM., Yaokokoré-Béibro, KH. et Odoukpé, KSG. 2015b. Richesse spécifique et abondance des oiseaux des dix Lacs Urbains de la ville de Yamoussoukro, dans le

centre de la Côte d'Ivoire. *Int. J. Innov. Appl. Stud*. 10(1): 217-225.

Koné, M., Aman, A., Adou Yao, CY., Coulibaly, L. et N'Guessan, KE. 2007. Suivi diachronique par télédétection spatiale de la couverture ligneuse en milieu de savane soudanienne en Côte d'Ivoire. *Rev. Télédétection*, 7(1-4): 433-446.

Kouadio, KP., Yaokokoré-Béibro, KH., Odoukpé, KSG., Konan, EM., N'Guessan, AM. et Kouassi, KP. 2014. Diversité avifaunique de la forêt classée de N'Ganda N'Ganda (Sud-est de la Côte d'Ivoire). *Afr. Sci.* 10(1): 181-193.

Kouadja, KES., Gnago, AJ., Odoukpé, KSG., Konan, EM. et Yaokokoré-Béibro, KH. 2021. Diversité avifaunique et impact de l'usage de filets dans la lutte contre les oiseaux déprédateurs du riz d'un bas-fond rizicole de Yamoussoukro (centre de la cote d'ivoire). *Agron. Afri*. 33(1): 107-118.

Lachenaud, O. 2006. Les oiseaux du Parc National du Banco et de la Forêt Classée de l'Anguédédou, Côte d'Ivoire. *Malimbus.* 28: 107-133.

N'Goran, APN., Brou, KM., Kouadio, PK. et Yaokokoré-Béibro, HK. 2022. Avifaune du lac de Buyo (Parc national de Taï, Sud-Ouest Côte d'Ivoire). *J. Appl. Biosci.* 176: 18255-18268. https://doi.org/10.35759/JABs.176.5

Niamien, CJM., Konan, EM., Kouadja, KES., Coulibaly, F., Diarrassouba, N., Koné, I., Yaokokoré-Béibro, KH. and N'Goran, KE. 2021. Preliminary data on the distribution and damage of the community of granivorous pest birds of sorghum (Sorghum bicolor (L.) Moench) (Korhogo, Côte d'Ivoire). *Int. J. Biosci.* 18(5): 214-223. DOI: http://dx.doi.org/10.12692/ijb/18.5.214-223

Niamien, MJC., Konan, ME., Ehouman, FB., Tuo, A., Yaokokoré-Béibro, HK. et N'Goran, EK. 2024. Avifaune du lac du barrage de Koko et ses environs (Korhogo, Côte d'Ivoire). *Int. J. Biol. Chem. Sci.* 18(4): 1465-1477. DOI : https://dx.doi.org/10.4314/ijbcs.v18i4.20

Niamien, CJM., Konan, EM., Kouadja, KES., Yaokokoré-Béibro, KH. and N'Goran, KE. 2020. Spatial distribution of the community of birds of the Koko urban dam and its surroundings (Korhogo, Côte d'Ivoire). *J. Bio. Env. Sci.* 17: 80-93.

Niamien, CJM., Konan, EM., Odoukpé, SGK., Yaokokoré-Béibro, KH. et N'Goran, KE. 2019. Premières données sur les variations saisonnières de la communauté d'oiseaux du barrage urbain de Koko (Korhogo, Côte d'Ivoire). *J. Anim. Plant Sci.* 41(2): 6926-6939.

Odoukpé, KSG., Konan, EM., Danho, M. et Yaokokoré-Béibro, KH. 2020. Oiseaux des champs de riz de Morofé, District de Yamoussoukro (Côte d'Ivoire). *Int. J. Innov. Appl. Stud*. 29(4): 1253-1263.

Odoukpé, KSG., Yaokokoré-Béibro, HK., Kouadio, PK. et Konan, ME. 2014. Dynamique du peuplement des Oiseaux d'une riziculture et ses environs dans la zone humide d'importance internationale de Grand-Bassam. *J. Appl. Biosci.* 79: 6909-6925. DOI: 10.4314/jab.v79i0.6

Okon, OM., Konan, EM., Kouadio, KP. et Yaokokoré-Béibro, HK. 2018. Diversité, abondance et distribution des touracos (Musophagidae) dans quelques milieux naturels du centre et du sud-est de la Côte d'Ivoire. *Int. J. Biol. Chem. Sci.* 12(4): 1851-1864.

Okon, OM., Kouadio, KP., Konan, EM. et Yaokokoré-Béibro, HK. 2019. Influence saisonnière des ressources alimentaires sur la distribution des touracos (Musophagidae) dans quelques milieux naturels du Centre et du Sud-est de la Côte d'Ivoire. *J. Appl. Biosci.* 139: 14167 – 14177.

Pauw, A. 2019. A bird's-eye view of pollination: biotic interactions as drivers of adaptation and community change. *Annu. Rev. Ecol. Evol. Syst.* 50: 477-502. DOI: https://doi.org/10.1146/annurev-ecolsys-110218-024845

Platel, RK. and Ravel, JV. 2019. Avian diversity at Parashnavada wetland, Gir-Sonnath District, Gujarat, India. *Int. J. Env. Ecol. Fam. Urb. Stud.* 9: 95-104. https://doi.org/10.24247/ijeefusapr20199

Thiollay, JM. 1986. Structure comparée du peuplement avien dans trois sites de forêt primaire en Guyane. *Rev. Ecol.* (*Terre Vie).* 41: 59-105.

Yabi, FB., Lougbégnon, OT., Houessou, GL. et Codjia, CTJF. 2015. Effets de l'anthropisation sur la diversité de l'avifaune des galeries forestières des Monts au Bénin. *Afri. Sci*. 11(6): 334 - 348 ISSN 1813-548X, http://www.afriquescience.info.

Yaokokoré-Béibro, KH. Avifaune des forêts classées de l'Est de la Côte d'Ivoire : données sur l'écologie des espèces et effet de la déforestation sur les peuplements. Cas des forêts classées de la Béki et de la Bossématié (Abengourou). Thèse Unique de Doctorat (non publiée. Univ. Cocody, Abidjan, Côte d'Ivoire. 2001.

Yaokokoré-Béibro, KH. 2010. Oiseaux du Parc national des Iles Ehotilé, sud-est Côte d'Ivoire. *Malimbus,* 32: 89-102.

Yaokokoré-Béibro, KH., Gueye, FM., Koné, YS. et Odoukpé, SGK. 2015c. Biodiversité ur-baine des Oiseaux dans la Zone humide d'Importance Internationale de Grand-Bassam (Sud-Est de la Côte d'Ivoire). *Int. J. Innov. Appl. Stud.* 11(2): 339-349.

Yaokokoré-Béibro, KH., Konan, EM. et Kouadio, KP. 2015a. Diversité et abondance des oiseaux de la forêt classée de la Téné, Centre-Ouest Côte d'Ivoire. *J. Anim. Plant Sci.* 24: 1-11.

Yaokokoré-Béibro, KH., Koné, YS. Odoukpé, KSG. et Gueye, MF. 2015b. Avifaune d'un milieu marécageux urbain dans la commune de Cocody (Abidjan, Côte d'Ivoire). *Int. J. Innov. Sci. Res.* 18(1): 1-10.

Yéo, P-R., Amani, CY. et Akoué, CY. 2021. Conservation des forêts classées à l'épreuve du développement urbain en Côte d'Ivoire : cas de la forêt classée du mont Korhogo. *Rev. Afr. Migr. Env.* 5(1&2): 80-95. DOI: 10.5281/zenodo.7621253

Zago, HM., Kouadio, KP., Koué-Bi, TM. et Yaokokoré-Béibro, KH. 2024. Diversité et abondance relative des oiseaux d'eau du Parc National de la Comoé, Côte d'Ivoire. *Europ. Sc. J.* 20(3): 116-135. DOI : https://doi.org/10.19044/esj.2024.v20n3p116

****