A new bird survey of the Mount Hombori region, Mali

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Summary

Mount Hombori, Mali, is an almost inaccessible tableland of *c.* 2 km^2, at the border between the Sahara desert and the Sahel. It is one of the few remaining unspoiled zones of primary vegetation of the Sahel, due to the high cliffs surrounding its summit plateau, which have protected its biota from pasture and agriculture. A two-month bird survey of the area was conducted in 2009, and 124 bird species were recorded, of which six are threatened or near-threatened (five of them raptors), and eight species are restricted to the Sahel biome, confirming that the site qualifies as an Important Bird Area. Recognition of this would help to improve protection for Mt Hombori and the table mountains between Hombori and Douentza.

Résumé

Nouvelle étude de l'avifaune de la région des Monts Hombori, au Mali. Le Mont Hombori Tondo, au Mali, est un plateau presqu'inaccessible de *c*. 2 km^2, à la limite du désert du Sahara et du Sahel. Il s'agit de l'une des rares zones de végétation sahélienne primaire demeurée préservée, en raison des hautes falaises entourant le plateau sommital, qui ont protégé ses biotes du pâturage et de l'agriculture. Pendant deux mois en 2009, l'avifaune de la zone a été étudiée et 124 espèces d'oiseaux ont été observées, dont six sont menacées ou quasi-menacées (dont cinq rapaces), et huit espèces ne se rencontrent que dans le biome Sahélien, ce qui confirme que le site mériterait d'être considéré comme une Zone Importante pour la Conservation des Oiseaux. Le reconnaître aiderait à améliorer la protection des Mts Hombori et des montagnes tabulaires entre Hombori et Douentza.

Introduction

Mali has three climatic areas: the north, with < 127 mm of rain per year, is part of the southern Sahara; the middle latitudes of the country are covered by the Sahel dry

savannas, with 200–600 mm of rain per year; the south, with up to *c*. 1400 mm rain per year, is in the Sudanian region. In the Sahel and Sudanian zones there are well-marked wet and dry seasons, with the wet season lasting from June to October. Hombori is a village of *c.* 6000 inhabitants in eastern Mali, in the Sahelian zone south of Timbuktu, at 15°N and 1°W. Average rainfall is therefore assumed to be *c.* 250–500 mm per year. The region is characterized by the presence of rocky outcrops and mountains. With an elevation of 1155 m, Mount Hombori is the highest peak in Mali, rising some 850 m above its surroundings. The vegetation on the near-inaccessible summit plateau is very diverse, and the mosaic of shrubby and meadow vegetation on the mid-level plateau (at around 400 m altitude) is also different from the anthropogenic savanna of the plain below. A lack of thorny species illustrates the absence of grazing pressure on the summit. Together with the nearby Main de Fatma, Mt Hombori is visited by increasing numbers of hikers and climbers in recent years. The climbing season starts in December and lasts until February. A climbing path equipped with fixed cables was installed on Mt Hombori a few years ago but the way up to its climbing sites is rather long and climbs are more diverse at Main de Fatma, which reduces the tourist pressure on Mt Hombori.

In the Hombori region a number of distinct habitats can be found in a small area. Mt Hombori (Hombori Tondo, Fig. 1A) comprises steep cliffs with many caves and a summit plateau with an assemblage of different habitats (rock, grassland, temporary swamps, small wooded areas). At the foot of the cliffs are stony slopes with isolated trees and bushes (Fig. 1B), some dense scrub vegetation and small fields, mainly along the temporary rivers. Below these slopes lies a dry and stony mid-level plateau (Fig. 1C), broken by ravines, gorges and rocky passages, and below this (Fig. 2D) are the lower plains, with dry grassland, isolated trees and small wooded patches, villages, roads and cultivation. Marshes (Fig. 2E) and temporary lakes (Fig. 2F) and rivers (Fig. 2G) in flood plains may carry more densely wooded areas (Figs. 2E and H) and have no settlements. At Hombori Hondo, sand dunes are found with a number of villages on and at the base of the dunes. Cultivation (Fig. 2I) includes millet and sorghum with interspersed trees and bushes; along dunes (mainly), are found densely vegetated gardens with a variety of fruit trees, palms and fields.

The main causes of the differences between these habitats are the presence or absence of water and the intensity of grazing. The lower plains and the mid-level plateau are grazed intensively by cattle. On the slopes, grazing is less intensive and mainly by goats, and on the summit plateau grazing is completely absent. Large wild mammals are rare in the Hombori region nowadays (Thiollay 2006), though Mt Hombori hosts a small population of Olive Baboons *Papio hamadryas*. The Rock Hyrax *Procavia capensis* is common around and on top of Mt Hombori. African Elephants *Loxodonta africana* of the most northerly population may be seen on their seasonal circular migration. In 2003, 2005 and 2009, fresh traces of a small cat (Felidae) were observed on the summit plateau and on the massif of Barkoussou (J. Kissling pers. comm.).

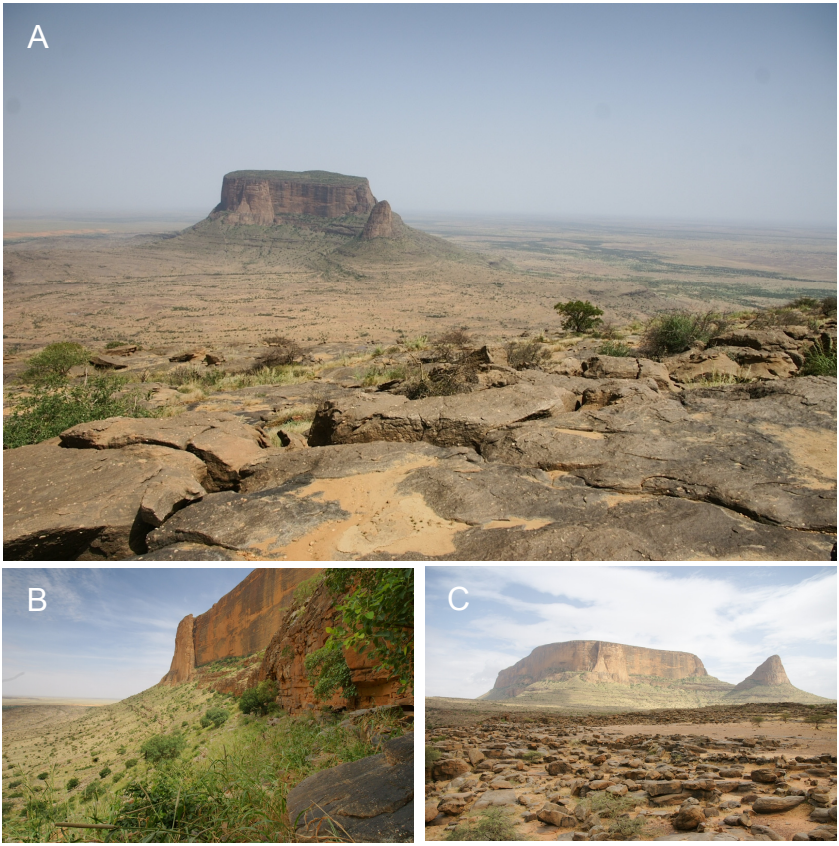

Figure 1. A: Mt Hombori, viewed from Mt Barkoussou, 2 Oct 2009. B: Slopes below the steep cliffs of Mt Hombori (locality 11: see Fig. 3 and Table 1 for locality numbers), 15 Oct 2009. C: The stony, dry, mid-level plateau below Mt Hombori (locality 10), 22 Oct 2009.

Most ornithological research in Mali has taken place in the Niger delta, an important wintering area for Palaearctic waterbirds. Even compared with the Bandiagara Cliffs and Dogon Country, *c.* 200 km southwest of Hombori (Balança & de Visscher 1993, Spierenburg 2000), the Hombori region has not been studied by many ornithologists. However, in 2006 and 2007, the massifs between Hombori and Douentza were surveyed by Clouet *et al*. (2009). In addition, some other recent observations have been made but not yet published, including in Hombori and Agoufou (35 km to the east of Hombori), 2004–6 by L. Kergoat (pers. comm.) and at

Hombori, Douentza and Gao (250 km east of Hombori) in 2002 and 2004 by F. Dowsett-Lemaire and R.J. Dowsett (pers. comm.).

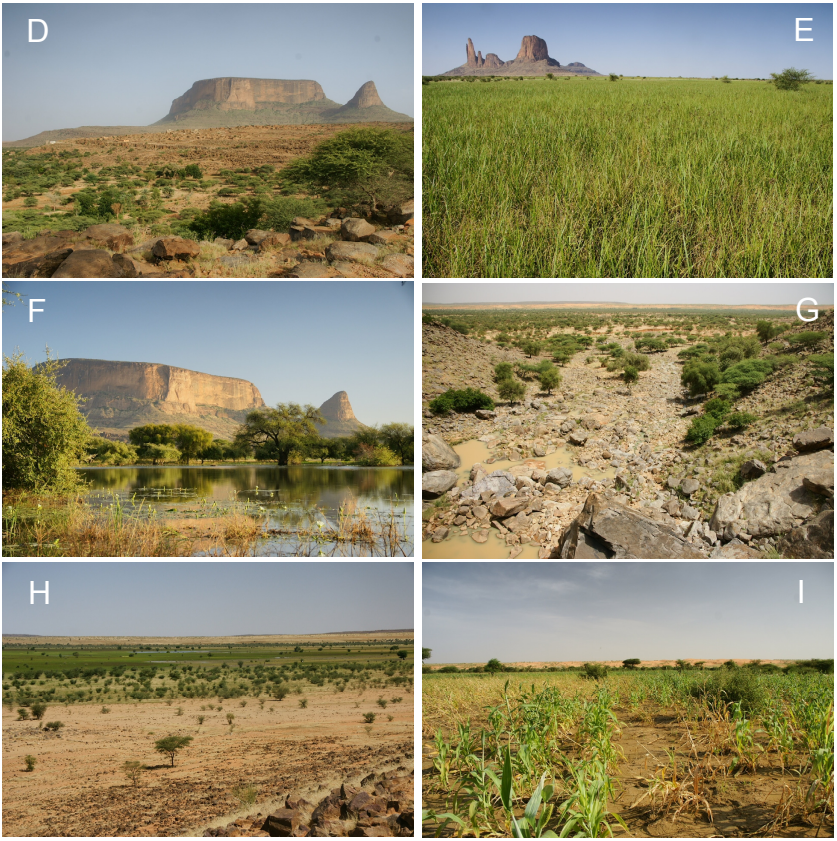

Figure 2. D: Mt Hombori, viewed from the plain (locality 6); in the middle distance, the former site of the village of Hombori, 2 Oct 2009. E: Temporarily inundated grassy plain (Fossa Marsh) with isolated trees (locality 4); in the background the isolated mountain, Main de Fatma (locality 2), 28 Oct 2009. F: View from temporary lakes in plain north of Hombori (locality 7), towards Mt Hombori, 7 Nov 2009. G: Temporary river between the mid-level plateau and the plain, northwest of Mt Hombori (locality 9), 3 Oct 2009. H: Succession of different habitats in the Hombori region: stony lower plain with isolated trees, humid grassland around temporary lakes (Fossa Marsh, locality 4), denser woodland, and sand dunes, 28 Oct 2009. I: Cultivation of crops in the plain between Mt Hombori and the "big dunes" (Table 1: locality 7), 6 Oct 2009.

The cliffs between Douentza and Hombori are not protected in any way, but have been suggested to qualify as an Important Bird Area (IBA: Clouet *et al*. 2009). The selection of Important Bird Areas (IBAs) has been a particularly effective way of identifying conservation priorities (Fishpool & Evans 2001). Mali has 17 IBAs (Fishpool & Evans 2001), ten of which are primarily wetlands. Seven sites qualify under criterion A1, two qualify under A2 and the remaining sites under A3, four of these for the Sudan-Guinea Savanna biome, four for the Sahel biome and two for the Sahara-Sindian biome. The nearest IBA to Hombori is the Bandiagara Cliffs, also a UNESCO World Heritage Site, which meets the A3 criterion for the Sahel and the Sudan-Guinea Savanna biome. Due to lack of knowledge of the avifauna of Mali, Fishpool & Evans (2001) pointed out the need to validate the sites already selected and to identify others.

Methods

During a two-month stay in Hombori (28 September to 4 December 2009), a bird survey was conducted in the Mt Hombori region. The aim was to add to knowledge of bird species present in the Hombori region and hence to determine its value and importance in the region, and to evaluate its potential as an IBA. Additionally, differences between the top of Mt Hombori and the lowlands are investigated.

The main habitats in the Mt Hombori region, including the summit plateau, were surveyed for birds in a non-systematic and non-standardised way. During the two months, 32 days were spent looking for birds at different locations (Fig. 3 and Table 1), but time spent in a given location varied considerably. Observations were mainly made in the early morning (6h00–9h00) and in the afternoon (15h00–18h00). Occasionally, observations were made at night.

Birds were identified using Borrow & Demey (2008). Species abundance was estimated as: Very Abundant (VA) >100 may be seen or heard in suitable habitat per day; Abundant (A) 11–100 may be seen or heard in suitable habitat per day; Common (C) = 1–10 may be seen or heard in suitable habitat per day; Frequent (F) = often seen but not every day; Uncommon (U) = fewer than five records during the observation period. Breeding evidence was assigned to two categories: p = possible breeding (based on abundance, behaviour such as presence of pairs, and habitat suitability), and c = confirmed breeding (mainly based on observations of nests or nesting birds). IBA biome-restricted species were assigned to biomes: A02 Sahara-Sindian, A03 Sahel and A04 Sudan-Guinea Savanna (Fishpool & Evans 2001).

Results

In total, 124 bird species were recorded (Table 2), including three threatened species and three Near-threatened species: Beaudouin's Snake Eagle *Circaetus beaudouini* (VU),

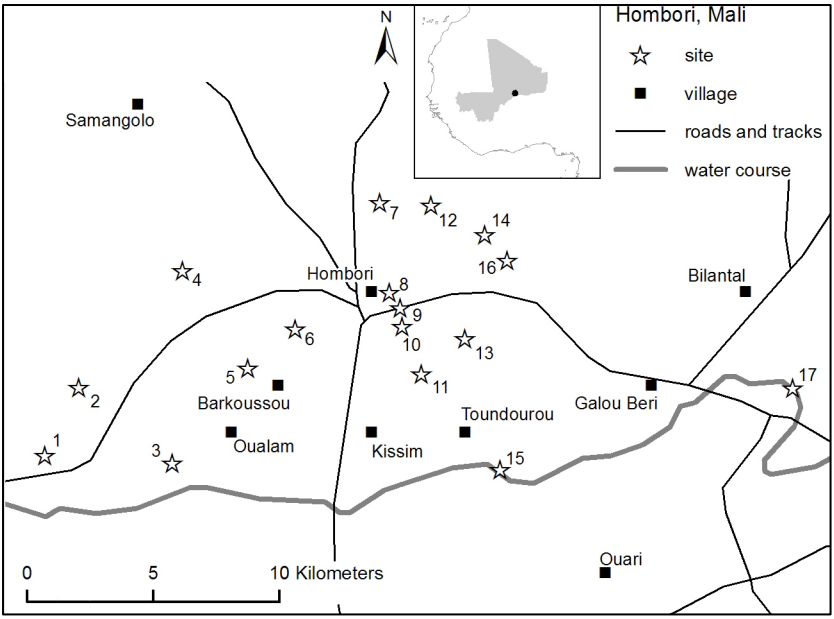

Figure 3. Map of localities.

White-backed Vulture *Gyps africanus* (NT), Rüppell's Vulture *Gyps rueppellii* (NT), Hooded Vulture *Necrosyrtes monachus* (EN), Egyptian Vulture *Neophron percnopterus* (EN) and European Roller *Coracias garrulus* (NT) (<www.iucnredlist.org>, consulted 1 Nov 2012). Additionally, eight species were found that are restricted to the Sahel biome A03 (African Collared Dove, Golden Nightjar, Yellow-breasted Barbet, Black Scrub-Robin, Cricket Warbler, Sennar Penduline Tit, Chestnut-bellied Starling, Sudan Golden Sparrow), one to biome A02 (Pharaoh Eagle Owl) and one to A04 (Fox Kestrel) (cf. Clouet *et al*. 2009). No breeding evidence was obtained for 76 of the observed species (61 %); possible breeding was assigned to 46 species (37 %) and breeding was confirmed for five species.

The slopes below Mt Hombori and the neighbouring temporarily dry river beds were inhabited by several bird species that, within the region of Hombori, seemed to be confined mainly to this specific habitat: Cliff Chat, Neumannn's Starling, Speckled Pigeon and Yellow-breasted Barbet. On the dry and stony mid-level plateau below this, Rock Bunting and Chestnut-backed Sparrow Lark were common. In the partly wooded lower plains, regularly observed species included White-throated Bee-Eater, Little Green Bee-Eater, Namaqua Dove, Abyssinian Roller, Chestnut-bellied Starling,

Table 1. Gazetteer of localities in the Hombori region, Mali.

No.	Locality	°N	°E
1	Point d'eau, west of Main de Fatma	15.2251	1.8164
2	Eastern slope of Main de Fatma	15.2492	1.8042
3	Oualam Plain at foot of Mt Safari	15.2222	1.7711
4	Fossa marsh (Fig. 2E and H)	15.2909	1.7673
5	Barkoussou Tondo (Mt Barkoussou: Fig. 4J) and valley between it and Ouari Tondo	15.2560	1.7440
6	Plain between Hombori village and Barkoussou (Fig. 2D)	15.2700	1.7270
7	Plain north of Hombori village	15.3150	1.6970
8	Hombori village	15.2830	1.6936
9	Plain east of Hombori village (stony slope, a waterfall, cliffs, wadi with bushes and trees: Fig. 2G)	15.2776	1.6897
10	Mid-level plateau south of Hombori village (Fig. 1C)	15.2710	1.6890
11	Slopes around Hombori Tondo and the Clé (adjacent small peak: Fig. 1B)	15.2541	1.6820
12	Base of dunes, north of Hombori village	15.3140	1.6787
13	Hombori Tondo (Mt Hombori) summit plateau (Fig. 4K)	15.2666	1.6666
14	Dunes, marsh and gardens at Koboukéré village	15.3035	1.6594
15	Marsh south of Toundourou village	15.2200	1.6540
16	Base of dunes, east of Hombori village, in lower plains	15.2945	1.6515
17	Ouami village, marsh and waterholes	15.2490	1.5497

Figure 4. J: Ascending Mt Barkoussou, *c.* 1 km west of Mt Hombori (locality 5), 2 Oct 2009. K: Summit plateau of Mt Hombori (locality 13), 30 Sep 2009.

Cricket Warbler, White-billed Buffalo-Weaver and Northern Grey-headed Sparrow. Some Palaearctic migrants and wintering birds were also present: Hoopoe, Common Redstart, several wheatear species, Western Olivaceous Warbler, Subalpine Warbler, Western Bonelli's Warbler, Woodchat Shrike and, at water holes, Black Winged Stilt,

Table 2. Species list. Numbers refer to the localities listed in Table 1; Ab = abundance; Br = breeding evidence; BV = recorded by Balança & de Vischer (1993); C = recorded by Clouet *et al.* (2009).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Ab	Br	BV	C
Ardeidae																					
Bubulcus ibis Cattle Egret							x		x	x		x			x		x	A		x	x
Egretta garzetta Little Egret															x			F		x	
E. intermedia Intermediate Egret							x							x	x	x	x	C			
Ardea purpurea Purple Heron							x								x			U			
A. cinerea Grey Heron							x		x			x			x			U		x	x
Ciconiidae																					
Ciconia abdimii Abdim's Stork																	x	U		x	x
C. ciconia White Stork				x												x		U			
Threskiornithinae																					
Plegadis falcinellus Glossy Ibis															x			F			
Anatidae																					
Dendrocygna viduata White-faced Whistling Duck															x			U			
Accipitridae																					
Pernis apivorus European Honey Buzzard							x											U			
Elanus caeruleus Black-shouldered Kite													x					U			x
Chelictinia riocourii African Swallow-tailed Kite			x															U			
Milvus migrans parasitus Black Kite		x	x	x			x	x	x	x	x	x	x	x		x		A	p	x	x
Neophron percnopterus Egyptian Vulture		x											x					U			x
Necrosyrtes monachus Hooded Vulture							x	x	x	x				x				C	p	x	x
Gyps africanus White-backed Vulture													x					U			
G. rueppellii Rüpell's Griffon Vulture		x			x		x			x	x		x					C	p		x
G. fulvus Eurasian Griffon Vulture		x																U			
Circus aeruginosus Marsh Harrier				x			x					x			x	x	x	C		x	x
Accipiter badius Shikra											x							U	p	x	
Buteo auguralis Red-necked Buzzard							x					x						F	p	x	x

Circaetus gallicus Short-toed Snake Eagle		x	x			x	x				x				C			x
C. beaudouini Beaudouin's Snake Eagle		x													U	p		x
Micronisus gabar Gabar Goshawk						x									U		x	x
Hieraaetus pennatus Booted Eagle		x		x		x		x	x	x	x	x			x	x	C			x
Falconidae																				
Falco tinnunculus Common Kestrel			x			x				x	x	x			x		C	p	x	x
F. alopex Fox Kestrel	x	x	x	x	x	x	x	x	x	x	x	x	x		x		C	p	x	x
F. biarmicus Lanner Falcon							x					x			x		U		x	x
F. peregrinus Peregrine Falcon	x							x				x					U		x	x
Phasianidae																				
Coturnix coturnix Common Quail											x	x					U			
Ptilopachus petrosus Stone Partridge		x			x					x		x					A	p	x	x
Recurvirostridae																				
Himantopus himantopus Black-winged Stilt				x										x		x	F			
Charadriidae																				
Vanellus tectus Black-headed Lapwing						x											F		x	
V. spinosus Spur-winged Lapwing														x			U			x
Scolopacidae																				
Tringa totanus Common Redshank																x	U			
T. nebularia Common Greenshank														x		x	U		x	
T. ochropus Green Sandpiper															x		U		x	x
T. glareola Wood Sandpiper																x	U		x	x
Actitis hypoleucos Common Sandpiper														x			U		x	
Pteroclididae																				
Pterocles exustus Chestnut-bellied Sandgrouse				x													U		x	x
Columbidae																				
Oena capensis Namaqua Dove	x	x		x		x	x	x	x		x		x	x	x		A	p	x	x
Columba guinea Speckled Pigeon	x	x		x	x	x	x			x		x		x	x		A	p	x	x
C. livia Rock Dove	x									x		x					C	p		x
Streptopelia decipiens African Mourning Dove													x				U			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Ab	Br	BV	C
S. vinacea Vinaceous Dove												x				x	x	F	p	x	x
S. roseogrisea African Collared Dove				x			x	x	x			x				x	x	F	p		x
S. turtur European Turtle Dove															x	x		U			
S. senegalensis Laughing Dove	x	x		x	x		x	x	x	x	x	x	x		x	x	x	A	p		x
Cuculidae																					
Clamator jacobinus Jacobin Cuckoo																	x	U			
C. glandarius Great Spotted Cuckoo				x														U		x	
Centropus senegalensis Senegal Coucal																	x	U		x	
Tytonidae																					
Tyto alba Barn Owl								x		x	x							C	p		
Strigidae																					
Bubo ascalaphus Pharaoh Eagle Owl								x			x							F	p		
Caprimulgidae																					
Caprimulgus eximius Golden Nightjar							x											U	p		
Apodidae																					
Apus pallidus Pallid Swift		x																U			x
A. affinis Little Swift		x					x	x		x	x		x	x				C	p	x	x
Tachymarptis aequatorialis Mottled Swift							x						x				x	U	p		x
T. melba Alpine Swift													x				x	U			x
Alcedinidae																					
Halcyon leucocephala Grey-headed Kingfisher														x				U	p	x	
H. senegalensis Woodland Kingfisher												x				x		U	p	x	
Meropidae																					
Merops albicollis White-throated Bee-eater							x			x								F	p		
M. orientalis Little Green Bee-eater							x	x	x									F	p	x	x
Coracidae																					
Coracias abyssinicus Abyssinian Roller			x	x			x	x	x			x		x	x	x	x	C	p	x	x
C. garrulus European Roller							x											U			

Upupidae																				
Upupa epops Hoopoe						x	x	x	x			x				F		x	x	
Phoeniculidae																				
Rhinopomastus aterrimus Black Wood-Hoopoe						x							x			U				
Bucerotidae																				
Tockus erythrorhynchus Red-billed Hornbill						x								x		F	p	x	x	
T. nasutus African Grey Hornbill						x	x		x			x	x			C	p	x	x	
Lybiidae																				
Trachyphonus margaritatus Yellow-breasted Barbet										x						F	p		x	
Picidae																				
Dendropicos goertae Grey Woodpecker						x										U	p	x		
Alaudidae																				
Calandrella brachydactyla Greater Short-toed Lark	x															U		x		
Eremopterix leucotis Chestnut-backed Sparrow-Lark		x			x	x	x	x	x			x			x	A	p	x	x	
E. nigriceps Black-crowned Sparrow-Lark	x			x												F	p		x	
Hirundinidae																				
Ptyonoprogne fuligula Rock Martin		x					x			x		x				C	c		x	
Hirundo aethiopica Ethiopian Swallow															x	U				
H. rustica Barn Swallow							x									U		x	x	
Motacillidae																				
Motacilla flava Yellow Wagtail															x	U		x		
Muscicapidae																				
Muscicapa striata Spotted Flycatcher													x			U		x		
Cercotrichas podobe Black Scrub-Robin	x					x	x	x								F	p	x	x	
Phoenicurus phoenicurus Common Redstart						x						x	x	x		F		x		
Oenanthe oenanthe Northern Wheatear			x			x	x	x								F		x	x	
O. hispanica Black-eared Wheatear						x		x	x							F				
O. isabellina Isabelline Wheatear						x			x							U				
Thamnolaea cinnamomeiventris Mocking Cliff-Chat		x		x			x			x		x				F	p		x	
Monticola solitarius Blue Rock-Thrush							x									U				

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Ab	Br	BV	C
Sylviidae																					
Hippolais pallida Olivaceous Warbler												x			x			U			
Sylvia borin Garden Warbler											x							U			
S. communis Common Whitethroat									x						x			U			
S. cantillans Subalpine Warbler							x		x			x						F		x	
S. curruca Lesser Whitethroat							x	x	x									U			
Cisticolidae																					
Cisticola aberrans Rock-loving Cisticola											x		x					F	p		
C. juncidis Zitting Cisticola				x			x					x		x			x	F	p	x	
Spiloptila clamans Cricket Warbler			x	x		x	x	x	x	x		x			x	x		A	c	x	x
Eremomela icteropygialis Yellow-bellied Eremomela							x											U			
Phylloscopidae																					
Phylloscopus trochilus Willow Warbler							x											U			
P. bonelli Western Bonelli's Warbler							x									x		F		x	x
Remizidae																					
Anthoscopus punctifrons Sennar Penduline Tit							x											U			
Nectarinidae																					
Hedydipna platura Pygmy Sunbird								x	x	x								F	p		x
Cinnyris pulchellus Beautiful Sunbird								x										U			
Laniidae																					
Lanius meridionalis Southern Grey Shrike			x	x			x										x	C			x
L. senator Woodchat Shrike				x		x	x		x	x		x						C			x
Corvidae																					
Corvus albus Pied Crow	x	x	x	x			x	x		x	x	x	x	x		x	x	A	p	x	x
C. ruficollis Brown-necked Raven		x	x				x	x	x			x	x					C	p		x
Sturnidae																					
Onychognathus neumanni Neumann's Starling					x			x	x		x		x					C	p		x
Lamprotornis chalybaeus Greater Blue-eared Starling			x	x			x					x				x	x	C	p		x

L. caudatus Long-tailed Glossy Starling														x	x		F			x	x
L. pulcher Chestnut-bellied Starling							x	x	x				x				C			x	x
Buphagidae																					
Buphagus africanus Yellow-billed Oxpecker														x			U			x	
Passeridae																					
Passer griseus Northern Grey-headed Sparrow			x	x			x	x				x		x	x	x	x	A	p	x	x
P. luteus Sudan Golden Sparrow							x										U			x	x
Ploceidae																					
Bubalornis albirostris White-billed Buffalo Weaver							x		x			x		x			F	c		x	x
Sporopipes frontalis Speckle-fronted Weaver	x						x		x						x		x	F		x	x
Ploceus luteolus Little Weaver				x			x			x							C			x	
P. vitellinus Vitelline Masked Weaver								x			x			x	x	x	x	F	c		
Quelea quelea Red-billed Quelea	x			x			x		x			x		x	x	x	x	C	p		x
Euplectes franciscanus Northern Red Bishop														x		x		U			
Estrildidae																					
Uraeginthus bengalus Red-cheeked Cordon-bleu							x					x				x		U		x	x
Lagonosticta senegala Red-billed Firefinch								x				x						F		x	x
Amadina fasciata Cut-throat Finch																		U		x	
Lonchura cantans African Silverbill	x											x						F			x
Viduidae																					
Vidua orientalis Sahel Paradise Whydah							x											U			x
V. chalybeata Village Indigobird								x						x				F			x
Emberizidae																					
Emberiza tahapisi Cinnamon-breasted Bunting		x			x		x	x	x	x	x		x					A	c	x	x
E. striolata House Bunting					x			x			x		x					C	p		x
Number of species	**13**	**20**	**12**	**24**	**9**	**3**	**61**	**37**	**30**	**22**	**23**	**29**	**27**	**22**	**30**	**29**	**28**			**60**	**69**

Greenshank, Green Sandpiper and Wood Sandpiper. Short-toed Snake Eagle and Booted Eagle were regularly seen flying above the plain. Species that occurred regularly and in quite high numbers in or flying over all habitats were Black Kite, Fox Kestrel and Laughing Dove.

Discussion

The 124 bird species recorded during the survey represent *c.* 20 % of all species observed in Mali. A longer period of observation or a different season would surely add more species, such as intra-African migrants. Clouet *et al*. (2009) found 97 species in the Douentza and Hombori region in 2006 and 2007. Of these, 69 species were recorded in 2009 (this study). Compared to the list of Clouet *et al.* (2009), this study provided 55 additional species for the Hombori region, including three biome-restricted species (Pharaoh Eagle Owl, Golden Nightjar and Sennar Penduline Tit). Balança & de Visscher (1993) found 127 species during a visit to the Dogon Plateau (200 km southwest of Hombori) during September–October, including 60 species also observed at Hombori; thus 64 species observed at Hombori in this study were not seen by Balança & de Visscher (1993). Forty-one species were observed by Balança & de Visscher (1993), Clouet *et* al. (2009) and during this study. Due to the absence of densely wooded areas, a number of woodland species that occur close to the southwest (*e.g.* Bandiagara cliffs: Balança & de Visscher 1993) are absent from the Hombori region (*e.g* Senegal Parrot *Poicephalus senegalus*, Western Grey Plantain-Eater *Crinifer piscator*, Bearded Barbet *Lybius dubius* and Scarlet-chested Sunbird *Nectarinia senegalensis*).

The presence of six threatened or near-threatened species and ten biome-restricted species confirm that the site is a candidate IBA, possibly qualifying under criteria A1 (three species listed as EN, whose regular presence merits IBA status, irrespective of their abundance; three species listed as VU or NT which would need to be regularly present in significant numbers to qualify as an IBA) and A3 for the Sahel biome (eight biome-restricted species).

The undisturbed summit and cliffs of Mt Hombori could be an important breeding and roosting site for several bird species, for vultures, raptors and species of rocky terrain, especially the Endangered Rüppell's Vulture and Egyptian Vulture, and other raptors (*e.g*. Fox Kestrel, Lanner). Together with Hooded Vultures (*c.* 20 individuals around the village of Hombori), Rüppell's Vulture was the most numerous vulture species (up to 37 individuals recorded in a single flock). The latter species was presumably breeding on the cliffs, and local people affirmed that it did so. This species also nests on trees, but cliffs are probably safer. Furthermore, the cliffs attract Rock Martins, Rock Doves and Little Swifts. The Stone Partridge was more often seen on the slopes and on the top of the table mountains (including Mt Hombori), presumably because these are less disturbed than the mid-level plateau and lower

plains. Because there is almost no disturbance by humans on Mt Hombori, birds likely choose the summit plateau as a resting place. For the House Bunting, the Hombori Region probably constitutes the southern limit of its breeding range.

The bird diversity of the Hombori region may be due to the region's habitat diversity, the presence of temporary rivers, flood plains and ponds, rocky outcrops and sandy plains. In October–November, a few weeks after the end of the rainy season, some areas were still flooded and therefore provided food and shelter for different bird species. Rainfall, vegetation and flooding are supposed to influence overall food supply in the Sahel, where the density of Palaearctic passerines increased with the number of trees, probably caused by increasing availability of invertebrate prey (Jones *et al*. 1996). Other previously inundated areas were already being grazed by cattle, and the numbers of waterfowl were low, probably due to the availability of other wetlands in the area, *e.g*. the Inner Niger Delta.

The status of West African birds may change quickly with increasing human population pressure and agriculture, road construction, tourism, hunting and mining developments. In the Hombori region, there is high pressure on landscape and habitats near villages and, in more humid areas, from various forms of agriculture, including the cultivation of millet and sorghum, and livestock grazing. With increasing population, woodcutting (mainly for cooking) could become a serious threat to biodiversity. According to local people, hunting or catching of birds is rare and is therefore not considered a threat to any of the observed bird species at the moment. Apparently, people formerly collected vulture's eggs, but they no longer do so. I never saw any wild birds being sold at the local market. Nevertheless, there is evidence that the severe decline of vultures and other large birds continues (*e.g*. Thiollay 2006). Therefore, the potential breeding sites of Rüppell's Vulture and other raptor species at Mt Hombori and its neighbouring cliffs deserve to be protected and to this end, establishing legal protection, monitoring remaining populations, protecting breeding colonies and reintroducing wild ungulate herds within protected areas are recommended by the IUCN (*Gyps rueppellii* at <www.iucnredlist.org> consulted 1 Nov 2010). The local population of Rüppell's Vulture should be kept under long-term surveillance in order to react to further decline of their population. Recognition of the table mountains from Hombori to Douentza as an IBA would help to improve their protection while, to complete our knowledge of breeding bird species, further observation should be conducted, especially during other periods of the year.

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