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THE FOREST BIRDS OF KENYA AND UGANDA

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ABSTRACT

Robust and rapid ways of assessing and monitoring forest biodiversity are increasingly necessary. To this end, we present a classification of forest birds in Kenya and Uganda into three simple categories: forest-specialists (FF species), forest generalists (F species) and forest visitors (f species). FF and F species, but not f species, are dependent on forests. Out of 479 forest birds in the two countries, 214 are FF, 156 F and 109 f species. Forest-dependent birds, and particularly forest specialists, are less widespread than forest visitors. Uganda has 420 forest birds compared to Kenya's 335, and a higher proportion of forest specialists: this reflects differences in forest structure and biogeography, rather than the area of natural forest. Using this classification allows species lists and densities to be interpreted more meaningfully. The number of FF species is an initial measure of a forest's relative conservation importance, while the proportion of FF, F and f species and their relative abundance will shift according to changes in forest structure.

INTRODUCTION

As forests come under increasing threat, the birds that live in them are receiving greater attention. From a conservation point of view, studies of forest birds may be especially useful for at least two reasons. First, the richness and composition of a forest's avifauna can give an indication of its overall value for the conservation of biological diversity (ICBP, 1992; Thirgood & Heath, 1994). And second, environmental change and the impacts of habitat alteration (or, more rarely, restoration) are often assessed by monitoring avian communities (Furness & Greenwood, 1993). Because birds are relatively easy to observe, count and identify (Pomeroy, 1992), avifaunal surveys can be made in a fraction of the time and expense required for most other faunal groups.

Some species have intrinsic conservation interest because they are rare, endangered or endemic (Collar *et al.*, 1994; Bennun & Njoroge, 1996). In other cases, however, we need an additional guide as to the importance of particular species in indicating forest condition and value. Of particular concern here are those species that may depend upon relatively intact, undisturbed forest. These 'forest specialists' are typical of the forest interior and are the species most likely to disappear when the forest is modified to any great extent. There are other species, 'forest generalists', that may also occur in undisturbed forest but which are able to exist—and may even be more numerous—at the forest edge or in modified and fragmented forests. However, these generalists continue to depend upon forests for some of their resources, such as nesting sites.

A third category of species are those which sometimes occur in forests but are more typical of other habitats, especially moist woodlands and thickets. Because they are not dependent upon forests, these species would almost certainly survive in those habitats even if all of the forest disappeared. Their presence in a forest, like that of truly non-forest birds, may sometimes be an indication of forest disturbance.

Using a simple classification of this type provides considerably more information than simple lists of species, and helps in the detection of subtle differences between forest avifaunas both in space and time (Bennun & Waiyaki, 1992a-e; Mlingwa *et al.*, in press). In this paper we classify the forest birds of Kenya and Uganda into these three categories and examine ways in which this classification can be used. We follow Hamilton (1990, page 7), in defining forests as "...a type of vegetation dominated by trees and without narrow-leafed grasses in the herbaceous layer".

METHODS

The classification has been developed from earlier versions for the forest birds of Uganda (Pomerov, 1988) and Kenva (Bennun & Waivaki, 1992f). Our classification is based primarily upon the habitat preferences of birds given by Britton (1980). Since these were developed for an entirely different purpose, this gives the classification a degree of independence. However, we have modified some of Britton's (1980) descriptions in the light of our own field experience, and that of a number of experienced colleagues who have commented upon earlier versions. Some disagreement will always remain about such a classification, although ours represents the consensus view of a number of forest ornithologists. However, we stress that the purpose of the list is not to provide a definitive statement about species' habitat requirements, but to allow standardised comparisons between and within particular forests. The structure of different forest types in East Africa varies greatly and so does the response to disturbance (see Bennun & Fanshawe, in press), which makes it difficult to set down definitions in structural terms. Our distinction here is simply between forest that largely has the original structure it possessed when not subjected to human disturbance ('intact' or 'undisturbed' forest), and forest that has been altered to a marked degree by human impacts ('disturbed' or 'secondary' forest), or is transitional in character between forest and other habitats (as in edges, small patches and narrow forest strips).

Taxonomy and nomenclature follow the revised East African list (OS-C, 1996). We have distinguished different races of a species when these show consistently different habitat preferences.

DEFINITIONS

We use the following working definitions in this paper:

Forest-dependent species

FF species (forest specialists) are the 'true' forest birds, characteristic of the interior of undisturbed forest. They may persist in secondary forest and forest patches if their particular

ecological requirements are met. Where they do occur away from the interior, they are usually less common. They are rarely seen in non-forest habitats. Breeding is almost invariably within forest.

F species (forest generalists) may occur in undisturbed forest but are also regularly found in forest strips, edges and gaps. They are likely to be commoner there and in secondary forest than in the interior of intact forest. Breeding is typically within forest.

Forest visitors

f species are birds which are often recorded in forest, but are not dependent upon it. They are almost always more common in non-forest habitats, where they are most likely to breed.

RESULTS AND DISCUSSION

Our classification is shown in Appendix 1. We identified 479 forest birds in Kenya and Uganda (treating separately two sub-species each of Little Sparrow Hawk Accipiter minullus, Black Cuckoo Cuculus clamosus and African Barred Owlet Glaucidium capense), slightly over one-third of the total avifauna of 1,232 species (OS-C, 1996). table 1 summarises the numbers of species in each category in Kenya and Uganda.

	Kenya only	Both countries	Uganda only	Total
FF-species	27	83	104	214
F-species	26	94	36	156
f-species	6	99	4	109
TOTAL	59	276	144	479 [°]

Table 1. The numbers of species in each category of forest birds in Kenya and Uganda

Total numbers of forest bird species^a: Kenya 335, Uganda 420

^aSub-species of three species are counted separately differ in their habitat preferences

Of the 214 FF species, 61.2% are found in only one of the two countries and 38.8% are shared by both. Corresponding proportions for the other categories are F, 39.7% and 60.3% (n = 156) and f, 9.2% and 90.8% (n = 109). Clearly, the more specialised forest birds are less likely to occur in both countries ($x^2 = 80.8$, df = 2, P < 0.0001), implying that they tend to have smaller ranges.

The forest-dependent species confined to Kenya are mostly from the coastal forests, with a small element from the Taita Hills and the montane forests of central Kenya. Most of the species confined to Uganda occur in the west of the country. These include montane species of the Albertine Rift refugium (Prigogine, 1985) and lowland birds characteristic of the Congo basin forests. All these areas have characteristic species with very restricted ranges (< 50,000 km²), and are categorised as Endemic Bird Areas (ICBP, 1992; Stattersfield *et al.*, in press). Thus, the smaller ranges of FF birds in East Africa are linked to biogeographical factors: they are more likely than less specialised species to be confined to a restricted area of avian endemism. This pattern concords with the view that such areas acted as 'refuges' during periods of the Pleistocene when forests shrank in size (e.g. Hamilton

1988, Lovett 1993). Forest-specialist species would presumably be less capable than others of dispersing through intermediate habitats, such as woodland or riverine forest strips.

Uganda has around the same number of F and f species as Kenya (table 1) but considerably more FF birds—187 versus 110. Thus, the forest-dependent birds confined to Uganda include a much higher proportion of FF species (74.3%) than those confined to Kenya (50.9%, $x^2 = 8.6$, df = 1, P = 0.003). This is not the result of differences in forest area, since Kenya in fact has more natural forest cover (12,400 km², Wass 1995) than Uganda (7,400 km², Howard 1991). However, most of Kenya's forest cover is montane or a relatively dry, low coastal form. Both these types are less rich in bird species than the moist lowland forests of Uganda (see below). Several Ugandan forests are also close to, or part of, the so-called Central Refugium, which has more endemic forest species than any other part of Africa (Stuart 1985).

Conservation significance

Since birds of the forest interior (the FF species) appear to be less adaptable than those of the forest edge, it is not surprising that many of them also have relatively limited distributions. Hence they are the ones of greatest conservation concern.

Pomeroy and Ssekabiira (1990) used data on bird distributions from Snow (1978) for nonpasserines and Hall and Moreau (1970) for passerines to estimate the ranges of land birds in Africa. The forest birds of Kenya and Uganda are a subset of these data and the extents of their distributions are shown in figure 1. (Some species could not be included, for example because of taxonomic revisions). The earlier study had found that various categories of specialist species tended to have smaller distributions than non-specialists; and non-passerines were more widely distributed than passerines. These generalisations also apply to the more detailed data for forest birds in East Africa (figure 1). The global distributions of FF-species are generally smaller than those of F-species, and much smaller than the f-species. For each of these three categories, the passerines have smaller distributions on average than the nonpasserines (table 2).

Table 2. The extents of the global distributions of various categories of forest birds. The figures
represent the modal number of squares occupied by species in each group. Each square is
2.5° of latitude by 2.5° longitude

	Non-passerines	Passerines
FF species	25	18
F species	45	28
f species	105	55

Reflecting their smaller ranges and lower adaptability, FF species are more likely to be threatened with extinction than F or f species. In Kenya and Uganda, 21 FF species (9.8% of the total: table 1) are regarded as globally threatened or near-threatened (Collar *et al.* 1994), compared to just three F species (1.9%; $x^2 = 8.47$, P < 0.005)¹. No f species is listed as globally threatened.

¹This ignores Taita Apalis *Apalis fuscigularis*, Taita White-eye *Zosterops silvanus* and Kulal White-eye *Z. kulalensis*, listed by Collar, *et al.* (1994) but not recognised as valid species in our list, where Taita Apalis is treated as a sub-species of Bar-throated Apalis (FF) and the white-eyes as sub-species of Montane White-eye (F). Including these species makes no

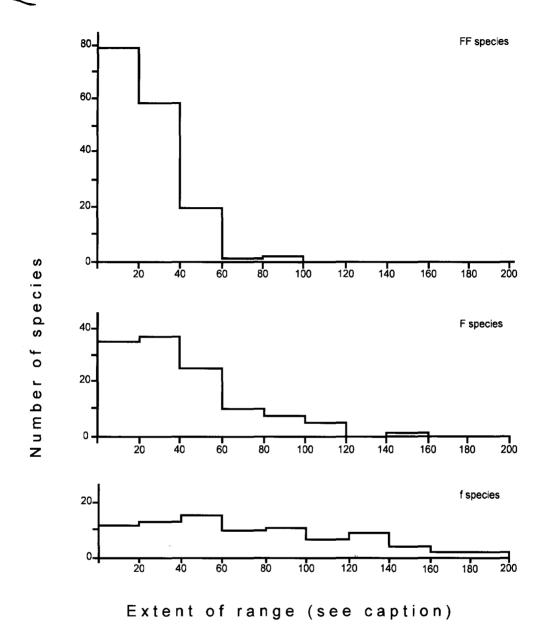


Figure 1. The extents of the global distributions of East African forest birds. The units are squares of 2.5° of latitude by 2.5° longitude. (Note that the total forested area in Africa is equivalent to about 50 squares, but a much larger number of squares contains at least some forest.)

difference to the conclusion from this analysis (test for difference in the proportions of threatened FF and F species that are threatened, $x^2 = 6.02$, P < 0.025).

The same pattern is clear at a regional level. table 3 shows the number of forest birds in each category that are classed as threatened with extinction in the eastern African region (Bennun & Njoroge, 1996; note that this classification excludes some species that have marginal ranges or populations in East Africa). The proportion of species that is threatened or near-threatened clearly rises with the degree of forest-dependence, from 3.7% for f species to 12.7% and 31.1% for F and FF species respectively ($x^2 = 37.8$, df = 2, P < 0.0001). The ratio of threatened to near-threatened species is higher for the FF than the F category (FF, 70.0% of the combined total threatened; F, 38.9%; $x^2 = 5.4$, df = 1, P = 0.02).

	FF	F	f	Total
Threatened/near-threatened				
Critical	1	0	0	1
Endangered	8	1	0	9
Vulnerable	26	6	0	32
Near-threatened	15	11	4	30
Total	50	18	4	72
Not threatened	111	124	105	340
Not qualifying				
for consideration	53	14	0	67
Total	214	156	109	479

Table 3. Numbers of species in each category of forest-dependence that are threatened or near-threatened with extinction in East Africa (Burundi, Kenya, Tanzania, Rwanda and Uganda; from Bennun & Njoroge, 1996). The numbers of species considered not threatened or not qualifying for consideration because of marginal ranges or population are also shown

The FF species are also the least known. The Kampala area has had many birders over the last 100 years. Yet in a comprehensive review of the area's avifauna (Carswell, 1986), 75% of the FF species recorded had no breeding records and/or an unclear status. Comparative figures for F and f species were 32.3% and 13.3% respectively ($x^2 = 62.3$, df = 2, P < 0.001; comparing FF and F species only, $x^2 = 24.7$, df = 1, P < 0.0001; for numbers in each category, see table 4). This difference is much less pronounced in the Kenya bird atlas square containing Kakamega Forest, where the forest-interior avifauna has been specifically studied by a number of workers (e.g. Zimmerman, 1972; Mann, 1985) (proportion of birds with confirmed breeding records, FF = 40.5%, F = 49.4%, n = 74, 77 respectively, $x^2 = 1.2$, P > 0.25; records from Lewis & Pomeroy [1989] for atlas square 48D). However, even in Kakamega breeding has been confirmed for well under half the forest avifauna, which is probably composed almost entirely of resident species. This reinforces the conclusion that much more attention generally needs to be paid to forest-dependent birds, especially the forest-specialist passerines.

Forest bird lists

The list in Appendix 1 corresponds closely to other, more geographically limited lists, for example Stuart (1983) and Mlingwa *et al* (1993). Dowsett *et al.* (undated) list over 270 species from the Nyungwe forest of Rwanda, almost all of which occur in Uganda and many in Kenya too. They differ in only three cases in their choice of forest/non-forest categories (although they have no 'edge' category). Similarly, there is close agreement as to what is a forest species in the lists of birds for Kakamega Forest in western Kenya (Zimmerman, 1972; Mann, 1985; Savalli, 1989) and for the Volcanoes National Park in Rwanda (Wilson, 1982).

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Agreement seems less close for places further away, such as Senegal (Thiollay, 1985) and Malawi (Dowsett-Lemaire, 1989). For instance, of 105 species of the forest interior and canopy in Malawi, about half are edge species in Kenya and Uganda. There is good agreement about forest species of hornbills, woodpeckers, greenbuls, alethes and warblers between Senegal and the East African list; but there are some interesting differences. Thus Thiollay (1985) considers the Bat Hawk Macheirhamphus alcinus and African Cuckoo-Hawk Aviceda cuculoides to be forest interior birds, whereas Britton (1980) lists them as occurring mainly in forest edge and woodland. Conversely, several Ugandan forest greenbuls are found in other habitats in west Africa. Thus the Simple Greenbul Clorocichla simplex is described by Keith et al. (1992) as a bird of 'brushy areas outside true forest, including dense scrub in savanna, orchard bush...' and the Honeyguide Greenbul Baeopogon indicator as preferring (amongst others) 'open habitats... and plantations'. Puvel's Illadopsis Illadopsis puveli is a bird of 'secondary scrub and gallery forest' in West Africa (Allport et al. 1996), but the recently discovered population in Budongo Forest, Uganda, is confined to undisturbed, closed-canopy Cynometra forest (Owiunji 1996). In other words, some of the species with more extensive distributions occupy substantially different habitats in different parts of their range.

Kenya and Uganda together make up less than 3% of the Afrotropical region. In an area this size, it appears possible to categorise forest species successfully. In a few species, such as Black Cuckoo *Cuculus clamosus* or Cardinal Woodpecker *Dendropicos fuscescens*, two sub-species have very different habitat preferences. Apart from these cases, indicated in the list, we have not encountered any species that shifts between forest-dependence categories within Kenya and Uganda.

Using the list

The number of FF species in a particular forest provides one indication of its conservation importance. table 4 gives some examples. Different forest types vary greatly in the numbers of forest-dependent species. Lowland Guineo-Congolian forests and Albertine Rift forests are the richest, with forests of the Kenyan highlands following. Coastal forests have notably few forest-dependent species. Clearly, direct comparisons across types may be misleading, since very different biogeographical histories are involved (see Hamilton, 1982; Stuart, 1985; Lovett, 1993; Stuart *et al.*, 1993; Fjeldså, 1994; Mlingwa *et al.*, in press). Within forest types, however, the list can be useful. Mlingwa *et al.* (in press) use the number of FF species, together with other important variables such as forest size and the presence of rare and endemic species, to assess the relative conservation importance of eastern African coastal forests.

Shifts in the proportion or relative abundance of FF and F species can be used to assess or monitor the effects of forest management on bird communities. Bennun & Waiyaki (1992a) conducted baseline surveys in two adjacent parts of the Trans-Mara Forest, which had undergone differing intensities of logging. Species composition was similar in the two sites, but densities of many FF species were higher in the less-disturbed site. Similar results were obtained in Kakamega (Bennun & Waiyaki, 1992c). This shift in relative densities of FF versus other birds seems to be one of the few consistent responses of East African bird species to forest disturbance, and thus a potentially useful feature for forest monitoring (Bennun & Fanshawe, in press).

This list is based on the habitat preferences of birds in undisturbed systems. The response of particular forest-specialists to forest degradation (e.g. from selective logging) will vary. To begin with, different forest types can show very different structural responses to disturbance (Fanshawe, 1995). These changes in structure will affect bird species in different ways. For

example, the African Broadbill *Smithornis capensis* occurs in pine plantation forest around Kibale Forest. Although this is a highly disturbed, indeed artificial, habitat, the dense shade and an open mid-storey mimic the conditions it favours in natural forest (LAB, unpubl. observations). In Mkongani Forest in the Shimba Hills, however, this species is confined to the small patches of unlogged forest that occur within a matrix of logged-over areas with an open canopy (Bennun & Waiyaki, 1992e and unpubl. data). Despite some specific exceptions we can generally expect declines in the populations of forest-specialists, particularly holenesting and insectivorous species, following forest degradation (Johns, 1988; Lambert, 1992; Thiollay, 1992; Fanshawe, 1995; Owiunji, 1996). One advantage of using the classification presented here is that it allows effects to be assessed easily at the community level, as well as species-by-species if required.

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REFERENCES

- Allport, G.A., M.J. Ausden, L.D.C. Fishpool, P.V. Hayman, P.A. Robertson & P. Wood (1996). Identification of *Illadopsis* spp. in the Upper Guinea forest. *Bull. African Bird Club* 3: 26–30.
- Bennun, L. & J. Fanshawe (in press). Using forest birds to evaluate forest management: an East African perspective. Pp. 10-22 in Doolan, S. (ed.) African rainforests and the conservation of biodiversity. Oxford: Earthwatch Europe.
- Bennun, L.A. & P.K. Njoroge (eds) (1996). Birds to watch in East Africa: A preliminary Red Data list. Research Reports of the Centre for Biodiversity, National Museums of Kenya: Ornithology 23.
- Bennun, L.A. & E.M. Waiyaki (1992a). Using birds to monitor environmental change in the Mau Forests. Research Reports of the Centre for Biodiversity, National Museums of Kenya: Ornithology 2.
- Bennun, L.A. & E.M. Waiyaki (1992b). An ornithological survey of the Mau Forest Complex. Research Reports of the Centre for Biodiversity, National Museums of Kenya: Ornithology 3.
- Bennun, L.A. & E.M. Waiyaki (1992c). An ornithological survey of Kakamega Forest. Research Reports of the Centre for Biodiversity, National Museums of Kenya: Ornithology 4.
- Bennun, L.A. & E.M. Waiyaki (1992d). Bird communities of the Arabuko-Sokoke Forest. Research Reports of the Centre for Biodiversity, National Museums of Kenya: Ornithology 5.
- Bennun, L.A. & E.M. Waiyaki (1992e). Forest birds of the Shimba Hills and Maluganji: A survey. Research Reports of the Centre for Biodiversity, National Museums of Kenya: Ornithology 10.

- Bennun, L.A. & E.M. Waiyaki (1992f). A list and classification of forest birds in Kenya. Research Reports of the Centre for Biodiversity, National Museums of Kenya: Ornithology 6.
- Britton, P.L. (ed.) (1980). Birds of East Africa: their habitat, status and distribution. EANHS, Nairobi.
- Carswell, M C. (1986). Birds of the Kampala area. Scopus Special Supplement Number 2. EANHS, Nairobi.
- Collar, N.J., M.J. Crosby & A. Stattersfield (1994). Birds to Watch 2: The world list of threatened birds. BirdLife Conservation Series no. 4. BirdLife International, Cambridge, England.
- Dowsett, R.J., F. Dowsett-Lemaire & J.-P. Vande Weghe (no date). Les oiseaux de la forêt de Nyungwe. Tauraco Study Report. Office Rwandais de tourisme et des Parcs Nationaux, Kigali.
- Dowsett-Lemaire, F. 1989. Ecological and biogeographical aspects of forest bird communities in Malawi. *Scopus* 13: 180.
- Fanshawe, J.H. (1995) The effects of selective logging on the bird community of Arabuko-Sokoke Forest, Kenya. D.Phil. thesis, University of Oxford.
- Fjeldså, J. (1994). Geographical patterns for relict and young species in Africa and South America, and the dilemma of ranking biodiversity. *Biodiversity and Conservation* 3: 207-226.
- Furness, R.W. & J.J.D. Greenwood (eds) (1993). Birds as monitors of environmental change. Chapman and Hall, London.
- Hall, B.P. & R.E. Moreau (1970). An atlas of speciation in African passerine birds. Brit. Mus. (Nat. Hist.), London.
- Hamilton, A.C. (1982). Environmental history of East Africa: a study of the Quaternary. Academic Press, New York.
- Hamilton, A.C. (1988). Guenon evolution and forest history. Pp. 13-34 in Gautier-Hion, A., Bourlière, F., Gautier, J-P., Kingdon, J. (eds), A primate radiation: Evolutionary biology of the African guenons. Cambridge: Cambridge University Press.
- Hamilton, A.C. (1990). A field guide to Ugandan forest trees. Makerere University, Kampala.
- Howard, P.C. (1991). Nature conservation in Uganda's tropical forest reserves. IUCN, Gland, Switzerland.
- ICBP (1992). Putting biodiversity on the map: priority areas for global conservation. ICBP, Cambridge, England.
- Johns, A.D. (1988). Effects of 'selective' logging on rain forest structure and composition and some consequences for frugivores and foliovores. *Biotropica* 20: 31-37.
- Kalina, J. and T.M. Butynski (1996). Checklist of birds of the Bwindi-Impenetrable Forest National Park. EANHS, Nairobi.
- Keith, S., E.K. Urban & C.H. Fry (1992). The birds of Africa, Volume 4. Academic Press, London.
- Lambert, F.R. (1992). The consequences of selective logging for Bornean lowland forest birds. *Philosophical Transactions of the Royal Society of London* 335: 443–457.
- Lewis, A.D. & D.E. Pomeroy (1989). A bird atlas of Kenya. A A Balkema, Rotterdam.
- Lovett, J.C. (1993). Climatic history and forest distribution in eastern Africa. Pp. 23-29 in J.C. Lovett & S.K. Wasser (eds). *Biogeography and ecology of the rainforests of eastern Africa*. Cambridge University Press, Cambridge, England.
- Mann, C.F. (1985). An avifaunal study in Kakamega Forest, Kenya, with particular reference to species diversity, weight and moult. Ostrich, 56: 236-262.

- Mlingwa, C.O.F., M.R. Huxham & N.D. Burgess (1993). The avifauna of Kazimzumbwe Forest reserve. *Scopus*, 16: 81-88.
- Mlingwa, C.O.F., E.M. Waiyaki, L.A. Bennun & N.D. Burgess (in press). The birds of eastern Africa's coastal forests. In N.D. Burgess (ed.) *Coastal forests in eastern Africa: biodiversity and conservation*. IUCN, Gland, Switzerland.
- OS-C (1996). *Checklist of the birds of East Africa*. Ornithological Sub-committee of the East Africa Natural History Society, Nairobi.
- Owiunji, I. (1996). The long term effects of forest management on the bird community of Budongo Forest Reserve, Uganda. MSc thesis, Makerere University, Kampala.
- Pomeroy, D.E. (1988). The Ff list: a preliminary list of forest birds in Uganda. Kampala: Makerere University Department of Zoology (cyclostyled).
- Pomeroy, D.E. (1992). *Counting Birds*. AWF Technical Handbook Series no. 6. African Wildlife Foundation, Nairobi.
- Pomeroy, D.E. & D. Ssekabiira (1990). An analysis of the distribution of terrestrial birds in Africa. *African Journal of Ecology* 28: 1-13.
- Prigogine, A. (1985). Conservation of the avifauna of the forests of the Albertine Rift. Pp. 277-296 in A.W. Diamond & T.E. Lovejoy (eds) Conservation of tropical forest birds. ICBP Technical publication No. 4. ICBP, Cambridge, England.
- Savalli, U.M. (1989). Checklist of birds of the Kakamega Forest and National Reserve. Published privately.
- Snow, D.W. (ed.) (1978). An atlas of speciation of African non-passerine birds. Brit. Mus. (Nat. Hist.), London.
- Stattersfield, A.J., M.J. Crosby, A.J. Long & D.C. Wege (in press). Endemic bird areas of the world. Priorities for biodiversity conservation. BirdLife Conservation Series no. 7. BirdLife International, Cambridge.
- Stuart, S.N. (1983). Biogeographical and ecological aspects of forest bird communities in eastern Tanzania. Ph.D. thesis, Cambridge University.
- Stuart, S.N. (1985). Rare forest birds and their conservation in eastern Africa. Pp. 187-196 in A.W. Diamond & T.E. Lovejoy (eds) Conservation of tropical forest birds. ICBP Technical publication No. 4. ICBP, Cambridge.
- Stuart, S.N., F.P. Jensen, S. Brøgger-Jensen & R.I. Miller (1993). The zoogeography of the montane forest avifauna of eastern Africa. Pp. 203–228 in J.C. Lovett & S.K. Wasser (eds.). Biogeography and ecology of the rainforests of eastern Africa. Cambridge University Press, Cambridge.
- Thiollay, J-M. (1985). The west African forest avifauna: a review. Pp. 171-186 in A.W. Diamond & T.E. Lovejoy (eds) *Conservation of tropical forest birds*. ICBP Technical publication No. 4. ICBP, Cambridge.
- Thiollay, J.M. (1992). Influence of selective logging on bird species diversity in a Guianan rain forest. *Conservation Biology* 6: 47-62.
- Thirgood, S.J. & M.F. Heath (1994). Global patterns of endemism and the conservation of biodiversity. Pp. 207–227 in P.L. Forey, C.J. Humphries & R.I. Vane-Wright (eds) Systematics and conservation evaluation. Systematics Association Special Volume no. 50. Clarendon Press, Oxford, England.
- Wass, P. (ed.) (1995). Kenya's indigenous forests: Status, management and conservation. IUCN, Gland, Switzerland.
- Wilson, R. (1982). The birds of the Parc National des Volcans. Mountain Gorilla Project, Rwanda.

- Wilson, S.E. (ed.) (1995). Bird and mammal checklists for ten national parks in Uganda, from the National Biodiversity Data Bank and other sources. Uganda National Parks, Kampala.
- Zimmerman, D.A. (1972). The avifauna of Kakamega Forest, western Kenya, including a bird population study. Bulletin of the American Museum of Natural History 149: 255-340.

APPENDIX 1: LIST AND CLASSIFICATION OF THE FOREST BIRDS OF KENYA AND UGANDA

OS-C	Br.	Cat.	English name	Scientific name	Dist.		
Threskiornithidae: Ibises and spoonbills							
63	52	FF	African Green Ibis	Bostrychia olivacea	K		
64		F	Spot-breasted Ibis	Bostrychia rara	U		
Anatidae	e: Duc	ks and	l geese				
75		F	Hartlaub's Duck	Pteronetta hartlaubi	U		
Accipitridae: Vultures, eagles, hawks etc.							
97	139	F	African Cuckoo-Hawk	Aviceda cuculoides	KU		
98	140	F	Eurasian Honey Buzzard	Pernis apivorus	KU		
99	143	F	Bat Hawk	Macheiramphus alcinus	KU		
105	87	f	Hooded Vulture	Necrosyrtes monachus	KU		
113	99	F	Southern Banded Snake Eagle	Circaetus fasciolatus	Κ		
114	97	F	Banded Snake Eagle	Circaetus cinerascens	KU		
117	96	f	African Harrier-Hawk	Polyboroides typus	KU		
125	111	F	African Goshawk	Accipiter tachiro	KU		
126	104	FF	Chestnut-flanked Goshawk	Accipiter castanilius	U		
127	102	f	Shikra	Accipiter badius	KU		
130	105	FF	(Western) Little Sparrowhawk	Accipiter minullus erythropus	U		
130	107	f	Little Sparrowhawk	A. m. minullus/A. m. tropicalis	KU		
133	110	F	Rufous-breasted Sparrowhawk	Accipiter rufiventris	KU		
134	106	F	Great Sparrowhawk	Accipiter melanoleucus	KU		
. 135	136	FF	Long-tailed Hawk	Urotriorchis macrourus	U		
137	129	f	Lizard Buzzard	Kaupifalco monogrammicus	KU		
139	124	FF	Mountain Buzzard	Buteo oreophilus	KU		
154	126	F	Ayres's Hawk Eagle	Hieraaetus ayresii	KU		
155	130	f	Long-crested Eagle	Lophaetus occipitalis	KU		
156	125	FF	Cassin's Hawk Eagle	Spizaetus africanus	U		
157	135	FF	African Crowned Eagle	Stephanoaetus coronatus	KU		
Falconid	ae: Fa	lcons					
166	152	F	African Hobby	Falco cuvieri	KU		
Phasiani	dae: 🤇)uails a	and francolins				
184	174	FF	Forest Francolin	Francolinus lathami	U		
191	178	FF	Nahan's Francolin	Francolinus nahani	U		
195	184	F	Scaly Francolin	Francolinus squamatus	KU		
196	173	F	Jackson's Francolin	Francolinus jacksoni	KU		

OS-C	Br.	Cat.	English name	Scientific name	Dist.		
197	179	FF	Handsome Francolin	Francolinus nobilis	U		
Numidi	dae: G	uineaf	owl				
202	188/	F	Crested Guineafowl	Guttera pucherani	KU		
Rallidae	9 :: Rails	s and r	elatives				
208			White-spotted Flufftail	Sarothrura pulchra	KU		
209			Buff-spotted Flufftail	Sarothrura elegans	KU		
214			Nkulengu Rail	Himantornis haematopus	U		
Columb	Columbidae: Pigeons and doves						
354		-	African Green Pigeon	Treron calva	KU		
357	357	F	Tambourine Dove	Turtur tympanistria	KU		
358	355	f	Blue-spotted Wood Dove	Turtur afer	KU		
359	356	f	Emerald-spotted Wood Dove	Turtur chalcospilos	KU		
362	338	FF	White-naped Pigeon	Columba albinucha	U		
363	343	FF	Western Bronze-naped Pigeon	Columba iriditorques	U		
364	340	FF	Eastern Bronze-naped Pigeon	Columba delegorguei	KU		
365	339	FF	Olive Pigeon	Columba arquatrix	KU		
367	344	FF	Afep Pigeon	Columba unicincta	KU		
369	337	FF	Lemon Dove	Aplopelia larvata	KU		
370	350	f	Red-eyed Dove	Streptopelia semitorquata	KU		
373	346	f	Ring-necked Dove	Streptopelia capicola	KU		
376	348	f	Dusky Turtle Dove	Streptopelia lugens	KU		
Psittacio	dae: Pa	arrots	and lovebirds				
378	371	FF	Grey Parrot	Psittacus erithacus	KU		
379	368	f	Brown-necked Parrot	Poicephalus suahelicus	U		
380	366	FF	Red-fronted Parrot	Poicephalus gulielmi	KU		
382	365	F	Brown-headed Parrot	Poicephalus cryptoxanthus	K		
384	363	f	Red-headed Lovebird	Agapornis pullarius	KU		
385	364	F	Black-collared Lovebird	Agapornis swindernianus	U		
Musoph	agidae	: Tura	acos				
390	372	F	Great Blue Turaco	Corythaeola cristata	KU		
391	377	F	Ross's Turaco	Musophaga rossae	KU		
392	380	FF	Ruwenzori Turaco	Ruwenzorornis johnstoni	U		
393	383	f	Purple-crested Turaco	Tauraco porphyreolophus	KU		
396			Black-billed Turaco	Tauraco schuettii	KU		
397			Fischer's Turaco	Tauraco fischeri	Κ		
398			Hartlaub's Turaco	Tauraco hartlaubi	KU		
399	381	f	White-crested Turaco	Tauraco leucolophus	KU		

OS-C	Br.	Cat.	English name	Scientific name	Dist.			
Cuculida	e: Cu	ckoos	and coucals					
405	394	f	Levaillant's Cuckoo	Oxylophus levaillantii	KU			
407	400	f	Thick-billed Cuckoo	Pachycoccyx audeberti	KU			
408	396	f	Black Cuckoo (i)	Cuculus clamosus gabonensis	KU			
408	396	FF	Black Cuckoo (ii)	Cuculus clamosus clamosus	KU			
409	399	F	Red-chested Cuckoo	Cuculus solitarius	KU			
412	398	f	Asian Lesser Cuckoo	Cuculus poliocephalus	KU			
413	398	f	Madagascar Lesser Cuckoo	Cuculus rochii	KU			
414	385	FF	Dusky Long-tailed Cuckoo	Cercococcyx mechowi	U			
415	387	FF	Olive Long-tailed Cuckoo	Cercococcyx olivinus	U			
416	386	FF	Barred Long-tailed Cuckoo	Cercococcyx montanus	KU			
417	389	F	African Emerald Cuckoo	Chrysococcyx cupreus	KU			
418	39 0	FF	Yellow-throated Cuckoo	Chrysococcyx flavigularis	U			
419	391	f.	Klaas's Cuckoo	Chrysococcyx klaas	KU			
421	401	F	Yellowbill	Ceuthmochares aereus	KU			
425	405	f	Senegal Coucal	Centropus senegalensis	KU			
Strigidae	Strigidae: Typical owls							
430	421	FF	Sokoke Scops Owl	Otus ireneae	Κ			
437	415	FF	Fraser's Eagle Owl	Bubo poensis	U			
440	425	F	Pel's Fishing Owl	Scotopelia peli	KU			
442	420	FF	Red-chested Owlet	Glaucidium tephronotum	KU			
443	417	F	African Barred Owlet	Glaucidium capense schlefferi	Κ			
443	418	FF	Chestnut Owlet	Glaucidium capense castaneum	U			
444	416	F	African Wood Owl	Strix woodfordi	KU			
445	41 1	FF	African Long-eared Owl	Asio abyssinicus	KU			
Caprimu	lgidae	e: Nigl	ntjars					
448	436	F	Fiery-necked Nightjar	Caprimulgus pectoralis	KU			
449	437	F	Montane Nightjar	Caprimulgus poliocephalus	KU			
458	426	FF	Bates's Nightjar	Caprimulgus batesi	U			
Apodida	e: Swi	fts						
464	456	FF	Sabine's Spinetail	Raphidura sabini	KU			
465	455	FF	Cassin's Spinetail	Neafrapus cassini	U			
466	454	F	Böhm's Spinetail	Neafrapus boehmi	Κ			
467	457	F	Mottled Spinetail	Telacanthura ussheri	KU			
468	453	F	Scarce Swift	Schoutedenapus myoptilus	KU			
Trogonic	lae: T	rogon	S					
484	462	F	Narina Trogon	Apaloderma narina	KU			

OS-C	Br.	Cat.	English name	Scientific name	Dist.
485	463	FF	Bar-tailed Trogon	Apaloderma vittatum	KU
Alcedini	dae: k	Kingfis	hers		
486	473	f	Grey-headed Kingfisher	Halcyon leucocephala	KU
490	474	F	Blue-breasted Kingfisher	Halcyon malimbica	U
492	471	FF	Chocolate-backed Kingfisher	Halcyon badia	U
493	469	F	Half-collared Kingfisher	Alcedo semitorquata	K
494	468	FF	Shining-blue Kingfisher	Alcedo quadribrachys	KU
496	467	FF	White-bellied Kingfisher	Alcedo leucogaster	U
497	478	f	African Pygmy Kingfisher	Ispidina picta	KU
498	477	FF	African Dwarf Kingfisher	Ispidina lecontei	U
Meropid	ae: Bo	ee-eate	ers		
501	480	f	Eurasian Bee-eater	Merops apiaster	KU
505	479	f	White-throated Bee-eater	Merops albicollis	KU
508	484	FF	Black Bee-eater	Merops gularis	U
509	486	FF	Blue-headed Bee-eater	Merops muelleri	K
514	488	F	Cinnamon-chested Bee-eater	Merops oreobates	KU
Coraciid	ae: R	ollers			
522	500	f	Broad-billed Roller	Eurystomus glaucurus	KU
523	501	FF	Blue-throated Roller	Eurystomus gularis	U
Phoenicu	ilidae	Woo	d-hoopoes		
525	503	FF	White-headed Wood-hoopoe	Phoeniculus bollei	KU
526	504	FF	Forest Wood-hoopoe	Phoeniculus castaneiceps	U
Buceroti	dae: H	Iornbi	ills		
535	526	FF	White-crested Hornbill	Tropicranus albocristatus	U
536	521	FF	Black Dwarf Hornbill	Tockus hartlaubi	U
537	516	FF	Red-billed Dwarf Hornbill	Tockus camurus	U
543	515	f	Crowned Hornbill	Tockus alboterminatus	KU
544	519	F	African Pied Hornbill	Tockus fasciatus	U
547	510	F	Trumpeter Hornbill	Bycanistes bucinator	К
548	512	FF	Piping Hornbill	Bycanistes fistulator	U
549	509	F	Silvery-cheeked Hornbill	Bycanistes brevis	Κ
550	513	F	Black-and-white-casqued Hornbill	Bycanistes subcylindricus	KU
551	511	FF	White-thighed Hornbill	Bycanistes cylindricus	U
552	514	FF	Black-wattled Hornbill	Ceratogymna atrata	U
Capitoni	idae: I	Barbet	s and tinkerbirds		
553	533	F	Grey-throated Barbet	Gymnobucco bonapartei	KU
554	530	F	White-eared Barbet	Stactolaema leucotis	K

OS-C	Br.	Cat.	English name	Scientific name	Dist.
556	531	FF	Green Barbet	Stactolaema olivacea	K
557	553	F	Speckled Tinkerbird	Pogoniulus scolopaceus	KU
558	550	FF	Western Green Tinkerbird	Pogoniulus coryphaeus	U
559	554	FF	Eastern Green Tinkerbird	Pogoniulus simplex	K
560	551	FF	Moustached Green Tinkerbird	Pogoniulus leucomystax	KU
561	547	FF	Red-rumped Tinkerbird	Pogoniulus atroflavus	U
562	555	FF	Yellow-throated Tinkerbird	Pogoniulus subsulphureus	U
563	548	F	Yellow-rumped Tinkerbird	Pogoniulus bilineatus	KU
566	529	FF	Yellow-spotted Barbet	Buccanodon duchaillui	KU
567	538	F	Hairy-breasted Barbet	Tricholaema hirsuta	KU
573	545	F	Red-faced Barbet	Lybius rubrifacies	U
575	546	f	Black-collared Barbet	Lybius torquatus	KU
576	576	f	Brown-breasted Barbet	Lybius melanopterus	К
578	534	f	Double-toothed Barbet	Lybius bidentatus	KU
580	556	F	Yellow-billed Barbet	Trachylaemus purpuratus	KU
Indicator	ridae:	Hone	yguides		
584	564	FF	Spotted Honeyguide	Indicator maculatus	U
585	569	f	Scaly-throated Honeyguide	Indicator variegatus	KU
586	563	f	Greater Honeyguide	Indicator indicator	KU
587	566	f	Lesser Honeyguide	Indicator exilis	KU
588	561	FF	Thick-billed Honeyguide	Indicator conirostris	KU
589	562	FF	Least Honeyguide	Indicator exilis	KU
590	570	FF	Willcocks's Honeyguide	Indicator willcocksi	U
591	568	FF	Dwarf Honeyguide	Indicator pumilio	U
592	565	f	Pallid Honeyguide	Indicator meliphilus	KU
593		FF	Lyre-tailed Honeyguide	Melichneutes robustus	U
594	571	FF	Zenker's Honeyguide	Melignomon zenkeri	U
595	572	FF	Cassin's Honeybird	Prodotiscus insignis	KU
596	574	f	Eastern Honeybird	Prodotiscus zambesiae	K
597	573	f	Wahlberg's Honeybird	Prodotiscus regulus	KU
Picidae:	Wryn	ecks a	nd woodpeckers		
599	575	f	Red-throated Wryneck	Jynx ruficollis	KU
600	577	FF	African Piculet	Sasia africana	U
603	578	F	Golden-tailed Woodpecker	Campethera abingoni	KU
604		F	Mombasa Woodpecker	Campethera mombassica	K
605	580	f	Green-backed Woodpecker	Campethera cailliautii	KU
606	584	FF	Fine-banded Woodpecker	Campethera tullbergi	KU

OS-C	Br.	Cat.	English name	Scientific name	Dist.
607	582	F	Buff-spotted Woodpecker	Campethera nivosa	KU
608	581	F	Brown-eared Woodpecker	Campethera caroli	KU
610	585	f	Cardinal Woodpecker (race <i>lepidus</i>)	Dendropicos fuscescens lepidus	KU
611	586	F	Gabon Woodpecker	Dendropicos gabonensis	U
613	594	f	Bearded Woodpecker	Dendropicos namaquus	KU
614	592	F	Yellow-crested Woodpecker	Dendropicos xantholophus	KU
615	589	FF	Elliot's Woodpecker	Dendropicos elliotii	U
616	590	f	Grey Woodpecker	Dendropicos goertae	KU
617	591	FF	Olive Woodpecker	Dendropicos griseocephalus	U
Eurylain	nidae:	Broad	lbills		
619	596	FF	African Broadbill	Smithornis capensis	KU
620	597	FF	Red-sided Broadbill	Smitornis rufolateralis	U
621	595	FF	African Green Broadbill	Pseudocalyptomena graueri	U
Pittidae:	Pittas	5			
622	598	FF	African Pitta	Pitta angolensis	KU
623	599	FF	Green-breasted Pitta	Pitta reichenowi	U
Hirundin	idae:	Swalle	ow and martins		
656		FF	White-throated Blue Swallow	Hirundo nigrita	U
670	639	f	White-headed Saw-wing	Psalidoprocne albiceps	KU
672	640	f	Black Saw-wing	Psalidoprocne holomelas	KU
Motacilli	dae: V	Wagtai	ils, pipits and longclaws		
675	994	F	Grey Wagtail	Motacilla cinerea	KU
676	995	F	Mountain Wagtail	Motacilla clara	KU
689	984	f	Tree Pipit	Anthus trivialis	KU
692	983	FF	Sokoke Pipit	Anthus sokokensis	Κ
Pycnonot	tidae:	Bulbu	ls		Ń
698	697	FF	Cameroon Sombre Greenbul	Andropadus curvirostris	KU
699	699	FF	Little Grey Greenbul	Andropadus gracilis	KU
700	696	FF	Ansorge's Greenbul	Andropadus ansorgei	K
701	705	F	Little Greenbul	Andropadus virens	KU
702	701	F	Yellow-whiskered Greenbul	Andropadus latirostris	KU
703	698	FF	Slender-billed Greenbul	Andropadus gracilirostris	KU
704	702	FF	Shelley's Greenbul	Andropadus masukuensis	KU
705	704	FF	Mountain Greenbul	Andropadus nigriceps	KU
707	703	FF	Stripe-cheeked Greenbul	Andropadus milanjensis	K
709	721	F	Grey-olive Greenbul	Phyllastrephus cerviniventris	Κ
710	719	FF	Toro Olive Greenbul	Phyllastrephus hypochloris	KU

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711	726	FF	Sassi's Olive Greenbul	Phyllastrephus lorenzi	U
712	723	FF	Fischer's Greenbul	Phyllastrephus fischeri	K
713	727	FF	Cabanis's Greenbul	Phyllastrephus cabanisi	KU
714	729	f	Northern Brownbul	Phyllastrephus strepitans	KU
715	730	F	Terrestrial Brownbul	Phyllastrephus terrestris	K
716	718	FF	White-throated Greenbul	Phyllastrephus albigularis	U
717	725	FF	Icterine Greenbul	Phyllastrephus icterinus	U
718	731	FF	Xavier's Greenbul	Phyllastrephus xavieri	U
719	724	FF	Yellow-streaked Greenbul	Phyllastrephus flavostriatus	KU
720	722	FF	Tiny Greenbul	Phyllastrephus debilis	Κ
721	728	F	Leaflove	Pyrrhurus scandens	U
722	733	F	Swamp Greenbul	Thescelocichla leucopleura	U
723	706	FF	Honeyguide Greenbul	Baeopogon indicator	KU
724	715	FF	Spotted Greenbul	Ixonotus guttatus	U
725	711	F	Joyful Greenbul	Chlorocichla laetissima	KU
726	710	F	Yellow-bellied Greenbul	Chlorocichla flaviventris	K
727	712	F	Simple Greenbul	Chlorocichla simplex	U
728	709	f	Yellow-throated Leaflove	Chlorocichla flavicollis	KU
729	732	f	Common Bulbul	Pycnonotus barbatus	KU
730	708	FF	Red-tailed Bristlebill	Bleda syndactyla	KU
731	707	FF	Green-tailed Bristlebill	Bleda eximia	U
732	713	FF	Eastern Bearded Greenbul	Criniger chloronotus	U
733	714	FF	Red-tailed Greenbul	Criniger calurus	U
. 734	716	F	Western Nicator	Nicator chloris	U
735	716	F	Eastern Nicator	Nicator gularis	K
736	717	FF	Yellow-throated Nicator	Nicator vireo	U
Timaliid	ae: Ba	bblers	5		
737	671	FF	African Hill Babbler	Pseudoalcippe abyssinica	KU
748	673	FF	Capuchin Babbler	Phyllanthus atripennis	U
749	672	FF	Grey-chested Illadopsis	Kakamega poliothorax	KU
750	675	FF	Brown Illadopsis	Illadopsis fulvescens	KU
751	676	FF	Mountain Illadopsis	Illadopsis pyrrhoptera	KU
752	677	FF	Pale-breasted Illadopsis	Illadopsis rufipennis	KU
753	674	FF	Scaly-breasted Illadopsis	Illadopsis albipectus	KU
		FF	Puvel's Illadopsis	Illadopsis puveli	U
Turdidae	e: Thr	ushes	and relatives		
756	782	F	White-starred Robin	Pogonocichla stellata	KU

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758	789	FF	Forest Robin	Stiphrornis erythrothorax	KU
760	786	FF	Lowland Akalat	Sheppardia cyornithopsis	U
761	785	FF	Equatorial Akalat	Sheppardia aequatorialis	KU
763	787	FF	East Coast Akalat	Sheppardia gunningi	K
766	761	FF	Grey-winged Robin	Sheppardia polioptera	KU
767	757	F	Archer's Robin-Chat	Cossypha archeri	U
769	749	f	Cape Robin Chat	Cossypha caffra	KU
770	752	F	Red-capped Robin Chat	Cossypha natalensis	KU
771	755	F	Rüppell's Robin Chat	Cossypha semirufa	K
772	751	f	White-browed Robin Chat	Cossypha heuglini	KU
773	750	F	Blue-shouldered Robin Chat	Cossypha cyanocampter	KU
774	753	F	Snowy-headed Robin Chat	Cossypha niveicapilla	KU
775	754	FF	White-bellied Robin Chat	Cossyphicula roberti	U
776	734	FF	Fire-crested Alethe	Alethe diademata	U
777	737	FF	Red-throated Alethe	Alethe poliophrys	U
778	736	FF	Brown-chested Alethe	Alethe poliocephala	KU
780	773	FF	Red-tailed Ant Thrush	Neocossyphus rufus	KU
781	772	FF	White-tailed Ant Thrush	Neocossyphus poensis	KU
787	743	f	Brown-backed Scrub Robin	Cercotrichas hartlaubi	KU
788	746	f	Eastern Bearded Scrub Robin	Cercotrichas quadrivirgata	Κ
79 0	745	FF	Northern Bearded Scrub Robin	Cercotrichas leucosticta	U
812	79 0	FF	Rufous Thrush	Stizorhina fraseri	U
816	793	F	Olive Thrush	Turdus olivaceus	KU
817		FF	Taita Thrush	Turdus (olivaceus) helleri	Κ
818	801	f	African Thrush	Turdus pelios	KU
822	795	FF	Spotted Ground Thrush	Zoothera guttata	K
823	794	FF	Black-eared Ground Thrush	Zoothera cameronensis	U
824		FF	Grey Ground Thrush	Zoothera princei	U
825	796	FF	Orange Ground Thrush	Zoothera gurneyi	К
826	802	FF	Abyssinian Ground Thrush	Zoothera piaggiae	KU
827	803	FF	Kivu Ground Thrush	Zoothera tanganjicae	U
828	800	FF	Forest Ground Thrush	Zoothera oberlaenderi	U
Muscica	pidae:	Old V	Vorld flycatchers		
831	936	F	African Dusky Flycatcher	Muscicapa adusta	KU
832	943	FF	Chapin's Flycatcher	Muscicapa lendu	KU
834	939	F	Cassin's Grey Flycatcher	Muscicapa cassini	U
835	944	FF	Yellow-footed Flycatcher	Muscicapa sethsmithi	U

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836	938	F	Ashy Flycatcher	Muscicapa caerulescens	KU
837	940	F	Dusky Blue Flycatcher	Muscicapa comitata	U
838	926	FF	Sooty Flycatcher	Muscicapa fuliginosa	U
840	933	F	White-eyed Slaty Flycatcher	Melaenornis fischeri	KU
841	932	F	Yellow-eyed Black Flycatcher	Melaenornis ardesiaca	U
847	931	F	Forest Flycatcher	Fraseria ocreata	U
850	946	f	Lead-coloured Flycatcher	Myioparus plumbeus	KU
851	942	FF	Grey-throated Flycatcher	Myioparus griseigularis	U
Sylviidae	: Old	World	l warblers		
869	918	f	Garden Warbler	Sylvia borin	KU
870	917	F	Blackcap	Sylvia atricapilla	KU
871	907	F	Wood Warbler	Phylloscopus sibilatrix	KU
872	904	F	Chiffchaff	Phylloscopus collybita	KU
873	908	f	Willow Warbler	Phylloscopus trochilus	KU
874	903	FF	Uganda Woodland Warbler	Phylloscopus budongoensis	KU
875	905	FF	Red-faced Woodland Warbler	Phylloscopus laetus	U
876	909	F	Brown Woodland Warbler	Phylloscopus umbrovirens	KU
877	906	F	Yellow-throated Woodland Warbler	Phylloscopus ruficapillus	K
879	889	F	Green Hylia	Hylia prasina	KU
883	833	FF	Evergreen Forest Warbler	Bradypterus lopezi	KU
884	835	F	Cinnamon Bracken Warbler	Bradypterus cinnamomeus	KU
885	831	F	Bamboo Warbler	Bradypterus alfredi	U
886	829	FF	Black-faced Rufous Warbler	Bathmocercus rufus	KU
892	844	F	Mountain Yellow Warbler	Chloropeta similis	KU
898	855	F	Chubb's Cisticola	Cisticola chubbi	KU
899	861	F	Hunter's Cisticola	Cisticola hunteri	KU
924	913	f	Tawny-flanked Prinia	Prinia subflava	KU
926	910	F	Banded Prinia	Prinia bairdii	KU
927	9 11	F	White-chinned Prinia	Prinia leucopogon	KU
933	837	f	Grey-backed Camaroptera	Camaroptera brachyura	KU
934	838	FF	Olive-green Camaroptera	Camaroptera chloronota	KU
935	841	FF	Yellow-browed Camaroptera	Camaroptera superciliosus	U
936	818	f	Yellow-breasted Apalis	Apalis flavida	KU
937	815	FF	Masked Apalis	Apalis binotata	U
938	815	FF	Montane Masked Apalis	Apalis personata	U
939	823	FF	Black-capped Apalis	Apalis nigriceps	U
940	824	F	Chestnut-throated Apalis	Apalis porphyrolaema	KU

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942	826	FF	Buff-throated Apalis	Apalis rufogularis	KU	
945	817	FF	Grey Apalis	Apalis cinerea	KU	
946	813	F	Brown-headed Apalis	Apalis alticola	Κ	
947	821	FF	Black-headed Apalis	Apalis melanocephala	K	
948	819	FF	Black-throated Apalis	Apalis jacksoni	KU	
949	816	FF	White-winged Apalis	Apalis chariessa	Κ	
950	825	F	Black-collared Apalis	Apalis pulchra	KU	
951	827	FF	Collared Apalis	Apalis ruwenzorii	U	
952	828	FF	Bar-throated Apalis	Apalis thoracica	K	
956	882	FF	Grauer's Warbler	Graueria vittata	U	
957	875	f	Grey-capped Warbler	Eminia lepida	KU	
958	895	FF	Grey Longbill	Macrosphenus concolor	U	
959	896	FF	Yellow Longbill	Macrosphenus flavicans	U	
960	897	FF	Kretschmer's Longbill	Macrosphenus kretschmeri	K	
961	884	FF	Short-tailed Warbler	Hemitesia neumanni	U	
967	923	FF	White-browed Crombec	Sylvietta leucophrys	KU	
968		FF	Lemon-bellied Crombec	Sylvietta denti	U	
969	924	F	Green Crombec	Sylvietta virens	KU	
972	880	F	Green-capped Eremomela	Eremomela scotops	KU	
974	876	F	Brown-crowned Eremomela	Eremomela badiceps	U	
975	881	FF	Turner's Eremomela	Eremomela turneri	KU	
979	891	F	Yellow-bellied Hyliota	Hyliota flavigaster	KU	
980	890	F	Southern Hyliota	Hyliota australis	KU	
Zosterop	oidae:	White	-eyes			
981	1131	f	Abyssinian White-eye	Zosterops abyssinicus	K	
982	1132	F	Montane White-eye	Zosterops poliogaster	K	
983	1133	f	Yellow White-eye	Zosterops senegalensis	KU	
Paridae:	Tits					
987	662	FF	Stripe-breasted Tit	Parus fasciiventer	U	
988	664	FF	Dusky Tit	Parus funereus	KU	
989	666	f	Northern Black Tit	Parus leucomelas	KU	
99 0	661	f	White-bellied Tit	Parus albiventris	KU	
994	668	f	African Penduline Tit	Anthoscopus caroli	KU	
995	901	FF	Tit-Hylia	Pholidornis rushiae	U	
Monarchidae: Monarch flycatchers						
997	964	FF	Little Yellow Flycatcher	Erythrocercus holochlorus	К	
999	966	FF	Chestnut-capped Flycatcher	Erythrocercus mccalli	U	

OS-C	Br.	Cat.	English name	Scientific name	Dist.
1000	963	f	African Blue Flycatcher	Elminia longicauda	KU
1001	962	F	White-tailed Blue Flycatcher	Elminia albicauda	U
1002	970	FF	White-tailed Crested Flycatcher	Trochocercus albonotatus	KU
1003	969	FF	White-bellied Crested Flycatcher	Trochocercus albiventris	U
1004	971	FF	Blue-mantled Crested Flycatcher	Trochocercus cyanomelas	KU
1005	972	F	Dusky Crested Flycatcher	Trochocercus nigromitratus	KU
1006	973	FF	Blue-headed Crested Flycatcher	Trochocercus nitens	U
1007	968	f	African Paradise Flycatcher	Terpsiphone viridis	KU
1008	967	FF	Red-bellied Paradise Flycatcher	Terpisphone rufiventer	KU
Platystei	ridae:	Batis	es, wattle-eyes and relatives		
1009	956	FF	African Shrike-flycatcher	Bias flammulatus	KU
1010	955	f	Black-and-white Flycatcher	Bias musicus	KU
1011	950	FF	Forest Batis	Batis mixta	К
1012	9 48	F	Ruwenzori Batis	Batis diops	U
1014	954	F	Pale Batis	Batis soror	K
1018		FF	Ituri Batis	Batis ituriensis	U
1019	960	f	Common Wattle-eye	Platysteira cyanea	KU
1020	96 1	F	Black-throated Wattle-eye	Platysteira peltata	KU
1021	958	FF	Chestnut Wattle-eye	Dyaphorophyia castanea	KU
1022	957	FF	Jameson's Wattle-eye	Dyaphorophyia jamesoni	KU
1023	959	FF	Yellow-bellied Wattle-eye	Dyaphorophyia concreta	KU
Prionopi	idae: I	Ielmet	-Shrikes		
1024	1042	FF	Red-billed Helmet-Shrike	Prionops caniceps	U
1027	1045	f	Retz's Helmet-Shrike	Prionops retzii	K
1028	1046	F	Chestnut-fronted Helmet- Shrike	Prionops scopifrons	K
Laniidae	e: Shri	kes			
1038	1035	f	Mackinnon's Fiscal	Lanius mackinnoni	KU
Malacon	otidae	: Busł	1-Shrikes		
1051	1013	F	Bocage's Bush-Shrike	Malaconotus bocagei	KU
1052	1019		Sulphur-breasted Bush-Shrike	Malaconotus sulfureopectus	KU
1053	1017	FF	Black-fronted Bush-Shrike	Malaconotus nigrifrons	K
1054	1017	FF	Many-coloured Bush-Shrike	Malaconotus multicolor	U
1055	1015	F	Doherty's Bush-Shrike	Malconotus dohertyi	KU
1056	1018	F	Four-coloured Bush-Shrike	Malconotus quadricolor	K

OS-C	Br.	Cat.	English name	Scientific name	Dist.		
1057	1014	FF	Fiery-breasted Bush-Shrike	Malaconotus cruentus	U		
1058	1016	FF	Lagden's Bush-Shrike	Malaconotus lagdeni	U		
1063	1008	F	Lühder's Bush-Shrike	Laniarius luehderi	KU		
1064	1004	f	Tropical Boubou	Laniarius aethiopicus	KU		
1068	1005	F	Montane Sooty Boubou	Laniarius poensis	U		
1069	1007	FF	Sooty Boubou	Laniarius leucorhynchus	U		
1071	1000	F	Northern Puffback	Dryoscopus gambensis	KU		
1072	999	F	Black-backed Puffback	Dryoscopus cubla	K		
1073	1002	FF	Red-eyed Puffback	Dryoscopus senegalensis	U		
1075	99 8	FF	Pink-footed Puffback	Dryoscopus angolensis	KU		
Campep	hagida	ae: Cu	ckoo-shrikes				
1076	688	f	Black Cuckoo-shrike	Campephaga flava	KU		
1077	690	f	Red-shouldered Cuckoo- shrike	Campephaga phoenicea	KU		
1078	689	FF	Petit's Cucko- shrike	Campephaga petiti	KU		
1079	691	FF	Purple-throated Cuckoo- shrike	Campephaga quiscalina	KU		
1080	693	FF	Grey Cuckoo-shrike	Coracina caesia	KU		
Dicrurid	ae: Di	rongos					
1083	644	F	Velvet-mantled Drongo	Dicrurus modestus	KU		
1084	645	F	Square-tailed Drongo	Dicrurus ludwigii	KU		
Oriolidae: Orioles							
1085	651	f	Eurasian Golden Oriole	Oriolus oriolus	KU		
1086	646	f	African Golden Oriole	Oriolus auratus	KU		
1087	649	f	Black-headed Oriole	Oriolus larvatus	KU		
1088	652	FF	Montane Oriole	Oriolus percivali	KU		
1089	647	F	Western Black-headed Oriole	Oriolus brachyrhynchus	KU		
1090	648		Green-headed Oriole	Oriolus chlorocephalus	K		
1091	650	FF	Black-winged Oriole	Oriolus nigripennis	U		
			and oxpeckers				
1099	1069	FF	Narrow-tailed Starling	Poeoptera lugubris	U		
1100	1070	FF	Stuhlmann's Starling	Poeoptera stuhlmanni	KU		
1101	1068	FF	Kenrick's Starling	Poeoptera kenricki	K		
1102	1067	FF	Waller's Starling	Onychognathus walleri	KU		
1103	1064	f	Red-winged Starling	Onychognathus morio	KU		
1104	1063	FF	Chestnut-winged Starling	Onychognathus fulgidus	U		
1105	1066	F	Slender-billed Starling	Onychognathus tenuirostris	KU		
1107	1058	F	Purple-headed Starling	Lamprotornis purpureiceps	U		

OS-C	Br.	Cat.	English name	Scientific name	Dist.		
1108	1057	F	Black-bellied Starling	Lamprotornis corruscus	K		
1109	1061	F	Splendid Starling	Lamprotornis splendidus	KU		
1121	1048	f	Violet-backed Starling	Cinnyricinclus leucogaster	KU		
1122	1047	FF	Abbott's Starling	Cinnyricinclus femoralis	Κ		
1123	1049	FF	Sharpe's Starling	Cinnyricinclus sharpii	KU		
Nectarinidae: Sunbirds							
1131	1081	FF	Grey-headed Sunbird	Anthreptes fraseri	U		
1132	1088	FF	Plain-backed Sunbird	Anthreptes reichenowi	Κ		
1134	1082	f	Western Violet-backed Sunbird	Anthreptes longuemarei	KU		
1136	1083		Uluguru Violet-backed Sunbird	Anthreptes neglectus	K		
1137	1085		Amani Sunbird	Anthreptes pallidigaster	K		
1138	1087		Green Sunbird	Anthreptes rectirostris	KU		
1140	1080		Collared Sunbird	Anthreptes collaris	KU		
1142	1121	F	Little Green Sunbird	Nectarinia seimundi	U		
	1112		Olive Sunbird	Nectarinia olivacea	KU		
1144	1129	f	Mouse-coloured Sunbird	Nectarinia veroxii	K		
1145	1090	FF	Blue-headed Sunbird	Nectarinia alinae	U		
1146	1130	F	Green-headed Sunbird	Nectarinia verticalis	KU		
1147	1097	FF	Blue-throated Brown Sunbird	Nectarinia cyanolaema	U		
1148	1120	F	Green-throated Sunbird	Nectarinia rubescens	KU		
1149	1091	f	Amethyst Sunbird	Nectarinia amethystina	KU		
1152	1128	f	Variable Sunbird	Nectarinia venusta	KU		
1156	1094	F	Olive-bellied Sunbird	Nectarinia chloropygia	KU		
1157	1109	F	Tiny Sunbird	Nectarinia minulla	U		
1158	1105	F	Greater Double-collared Sunbird	Nectarinia afra	U		
	1115		Northern Double-collared Sunbird	Nectarinia preussi	KU		
	1108		Eastern Double-collared Sunbird	Nectarinia mediocris	K		
	1118		Regal Sunbird	Nectarinia regia	U		
1166	1092	f	Purple-banded Sunbird	Nectarinia bifasciata	KU		
	1093		Orange-tufted Sunbird	Nectarinia bouvieri	KU		
	1096		Copper Sunbird	Nectarinia cuprea	KU		
	1126		Tacazze Sunbird	Nectarinia tacazze	KU		
1178	1117	F	Purple-breasted Sunbird	Nectarinia bifasciata	U		
1179	1103	f	Bronze Sunbird	Nectarinia kilimensis	KU		

OS-C	Br.	Cat.	English name	Scientific name	Dist.				
1180	1119	f	Golden-winged Sunbird	Nectarinia reichenowi	KU				
1181	1099	F	Malachite Sunbird	Nectarinia famosa	KU				
1183	1125	F	Superb Sunbird	Nectarinia superba	KU				
Ploceida	Ploceidae: Weavers and relatives								
1203	1134	f	Grosbeak Weaver	Amblyospiza albifrons	KU				
1204	1184	f	Compact Weaver	Ploceus superciliosus	KU				
1205	1159	f	Baglafecht Weaver	Ploceus baglafecht	KU				
1207	1179	f	Slender-billed Weaver	Ploceus pelzelni	KU				
1209	1176	f	Black-necked Weaver	Ploceus nigricollis	KU				
1210	1177	f	Spectacled Weaver	Ploceus ocularis	KU				
1211	1174	FF	Black-billed Weaver	Ploceus melanogaster	KU				
1212	1157	F	Strange Weaver	Ploceus alienus	U				
1215	1158	f	Orange Weaver	Ploceus aurantius	KU				
1219	1164	f	Northern Brown-throated Weaver	Ploceus castanops	KU				
1233	1175	f	Vieillot's Black Weaver	Ploceus nigerrimus	KU				
1234	1188	F	Weyn's Weaver	Ploceus weynsi	U				
1235	1167	FF	Clarke's Weaver	Ploceus golandi	Κ				
1237	1186	FF	Yellow-mantled Weaver	Ploceus tricolor	KU				
1238	1156	FF	Maxwell's Black Weaver	Ploceus albinucha	U				
1239	1161	F	Dark-backed Weaver	Ploceus bicolor	KU				
1240	1169	FF	Brown-capped Weaver	Ploceus insignis	KU				
1243	1154	F	Blue-billed Malimbe	Malimbus nitens	U				
1244	1153	F	Crested Malimbe	Malimbus malimbicus	U				
1245	1152	FF	Cassin's Malimbe	Malimbus cassini	U				
1246	1155	FF	Red-headed Malimbe	Malimbus rubricollis	KU				
Estrildid	lae: W	axbills	5						
1268	1252	FF	Red-fronted Antpecker	Parmoptila woodhousei	U				
1269	1246	F	Grey-headed Negrofinch	Nigrita canicapilla	KU				
1270	1248	F	Pale-fronted Negrofinch	Nigrita luteifrons	U				
1271	1245	FF	Chestnut-breasted Negrofinch	Nigrita bicolor	U				
1272	1247	F	White-breasted Negrofinch	Nigrita fusconota	KU				
1273	1243	f	White-collared Oliveback	Nesocharis ansorgei	U				
1274	1244	f	Grey-headed Oliveback	Nesocharis capistrata	U				
1278	1223	F	Red-faced Crimsonwing	Cryptospiza reichenovii	U				
1279	1224	F	Abyssinian Crimsonwing	Cryptospiza salvadorii	KU				
1280	1222	F	Dusky Crimsonwing	Cryptospiza jacksoni	U				

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OS-C	Br.	Cat.	English name	Scientific name	Dist.
1281	1225	F	Shelley's Crimsonwing	Cryptospiza shelleyi	U
1282	1254	F	Black-bellied Seedcracker	Pyrenestes ostrinus	U
1284	1258	FF	Grant's Bluebill	Spermophaga poliogenys	U
1285	1259	F	Red-headed Bluebill	Spermophaga ruficapilla	KU
1286	1235	F	Peters's Twinspot	Hypargos niveoguttatus	Κ
1287	1242	FF	Green-backed Twinspot	Mandingoa nitidula	KU
1288	1221	f	Brown Twinspot	Chytospiza monteiri	KU
1290	1220	f	Dusky Twinspot	Euschistospiza cinereovinacea	U
1299	1229	f	Yellow-bellied Waxbill	Estrilda quartinia	KU
1304	1230	f	Black-crowned Waxbill	Estrilda nonnula	KU
1305	1227	F	Black-headed Waxbill	Estrilda atricapilla	KU
1319	1265	f	Black-and-white Mannikin	Lonchura bicolor	KU
1320	1267	f	Magpie Mannikin	Lonchura fringilloides	KU
Fringilli	dae: S	eed-ea	ters and canaries		
1332	1282	f	Yellow-crowned Canary	Serinus canicollis	KU
1333	1283	f	African Citril	Serinus citrellinoides	KU
1343	1 292	f	Streaky Seed-eater	Serinus striolatus	KU
1344	1281	FF	Thick-billed Seed-eater	Serinus burtoni	KU
1 349	1279	F	Oriole-Finch	Linurgus olivaceus	KU

OS-C, species number from OS-C (1996)

Br., species number from Britton (1980)

Cat. forest-dependence category: FF, specialist; F, generalist; f, visitor

Dist., distribution: K, Kenya, U, Uganda