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The composition of Itombwe forest's avifauna [1])

By

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Introduction

The avifauna of the Itombwe forest, situated in eastern Zaire, has been studied intensively since 1950 and detailed reports have been or are to be published in the near future on this subject (Prigogine, 1971, in press a, in press b).

In order to facilitate the comparison of Itombwe's bird fauna with other forests' faunas, especially montane forests in Central Africa, it appears to be useful to establish statistics about the composition of Itombwe's avifauna and the endemics encountered [2]).

General statistics

General statistics are given not only for the whole Itombwe forest, with an area of about 12 000 km^2, but also for three altitudinal ranges in order to demonstrate a possible influence of the altitude on the composition of Itombwe's avifauna: up to 1000 m for lowland forest, between 1600 and 1800 m, just above the lower limit of the montane forest, and between 2000 and 2200 m, for higher montane forest. The first altitudinal zone corresponds to the presence of all eurytopic taxa associated with equatorial lowland forest (represented by "LF") and already with a small number of stenotopic birds typical of the transition forest (represented by "TF") (Prigogine, 1976.) The second altitudinal zone corresponds to eurytopic forms which ascend in montane forest (represented by "LF + MF") and to characteristic montane forest birds (represented by "MF"). Most of the species found in the third altitudinal zone, between 2000 and 2200 m, are typical montane forest birds. Yet, even at this high altitude, eurytopic species represent, as we shall see later, not a negligible proportion.

The families have been divided into five groups following Moreau (1966). All details may be found in the appendix (Tables A. 1 to A. 4).

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[1]) I have the great pleasure to dedicate this paper to Professor Dr. M. Eisentraut, the eminent specialist of the vertebrate faunas of Cameroon and Fernando Po, on the occasion of his 75th birthday.

[2]) These statistics have been established in conformity with a questionary sent by Mrs. B. P. Hall previously to the Fourth Pan-African Ornithological Congress.

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It may be seen from Table 1 that the forest avifauna of the whole region comprises 41 families, 152 genera and 333 species, including two Palaearctic migrants [1]). This high number of species indicates the great diversity of Itombwe's bird fauna, which contains about 75 % of all African forest species. The contribution of the groups A and C is weak and this is normal for a forest habitat. On the other hand, group B is represented by 24 species, i. e. 7 % of the total. On the whole the non-passerines form 35 % of the total, the passerines 65 %.

Table 1: **Number of Families, Genera and Species**

Group	Total area			Altitude in m: < 1000 m			1600–1800			2000–2200		
	F	G	S	F	G	S	F	G	S	F	G	S
A	5	7	7	5	7	7	1	1	1	0	0	0
B	2	16	24	2	13	18	2	8	10	2	6	6
C	1	3	6	1	3	5	1	2	2	1	2	2
D	15	42	78	15	40	62	11	24	30	12	23	28
A–D	23	68	115	23	63	92	15	35	43	15	31	36
E	18	84	218	16	68	131	17	57	91	15	43	69
Total	41	152	333	39	131	223	32	92	134	30	74	105

F: family, G: genus, S: species.

With increasing altitude, the number of families, genera and species diminishes, as the area of forest contracts. This reduction is especially appreciable for non-passerines, for which the number of species drops from 92 to 43, while the altitude rises from 1000 to 1600–1800 m. The composition of the avifauna in the montane forest is less homogeneous than in the lowland forest, as, even for the altitudinal zone of 2000—2200 m, the eurytopic species still represent 26/105, i. e. 25 % of all species present (see Table A. 4). This proportion is quite important and is higher than the value generally assumed (Chapin, 1932; Moreau, 1966).

At low altitude the percentage of non-passerines is higher (41 %) than in the montane forest, where they form about one third of all species. This proportion seems to be the same for the two zones of higher ground considered (respectively 32 and 34 %). It may also be noted, that in the montane forest the families present are equally distributed between the non-passerines and the passerines.

Table 2 gives the number of species per genus. The number of species belonging to monotypic genera is higher for the non-passerines in the

[1]) Only migrants *(Buteo buteo vulpinus* and *Pernis apivorus)* that remain during their whole wintering in this forest, excluding migrants in transit.

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Table 2: **Number of species per genus**

Group	Total area	Altitude in m		
		< 1000	1600–1800	2000–2200
A	1.00	1.00	1.00	—
B	1.50	1.38	1.25	1.00
C	2.00	1.67	1.00	1.00
D	1.86	1.55	1.25	1.22
A–D	1.69	1.46	1.23	1.16
E	2.59	1.93	1.60	1.60
Total	2.19	1.70	1.46	1.42

whole area considered. With increasing altitude the number of species per genus diminishes and this is in relation with the impoverishment of the bird fauna at higher altitudes. It seems that this ratio is about the same for the two altitudinal ranges chosen.

Finally, Table 3 shows the number of species which can be considered as members of a superspecies [1]) and the number of members of the same superspecies. I have included in Table 3 three species (*Campephaga flava, Ploceus ocularis, Cinnyricinclus leucogaster*) which are not present in the forest habitat or only temporarily (and which are not included in Tables A. 1 to A. 4) so. The presence of four superspecies with three members and twenty superspecies with two members is remarkable. The highest number of superspecies is found for the Sylviidae, where they represent about 44 % of all species. On the whole, the 87 superspecies listed in Table 3 correspond to 115 species. As my list is certainly incomplete for the non-passerine birds, I will limit the discussion to passerines only. Not including the three species not counted as forest birds, the number of species within a superspecies is 101/218, i. e. 46.3 % of all passerines encountered in the Itombwe forest belong to superspecies. Hall and Moreau (1970) have given only 44 superspecies with 125 species for lowland and montane forests. This lower number is due principally to my broader definition of a forest species (for the statistics considered) and the inclusion by Hall and Moreau of several superspecies in species-groups.

1) See White (1965) for the non-passerines and Hall and Moreau (1970) for the passerines.

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Table 3: **Number of superspecies**

Family	1 member	2 members	3 members	Total
Accipitridae [1])		1		1
Group B		1		1
Phasianidae	2			2
Group C	2			2
Bucerotidae	1			1
Columbidae	1			1
Cuculidae		1		1
Musophagidae	1			1
Picidae	2			2
Group D	5	1		6
Groups A–D	7	2		9
Campephagidae [2])	2	2		4
Dicruridae	2			2
Eurylaimidae		1		1
Hirundinidae	2			2
Laniidae	3	3		6
Muscicapidae [3])	7	2	1	10
Nectariniidae	8	3		11
Oriolidae		1		1
Paridae	2			2
Ploceidae [4])	4	1	2	7
Pycnonotidae [5])	4			4
Sturnidae [6])	2	2		4
Sylviidae [7])	14			14
Timaliidae	1	2		3
Turdidae [8])	5	1	1	7
Group E	56	18	4	78
Total	63	20	4	87

[1]) *Buteo buteo — B. tachardus*
[2]) With *Coracina azurea – C. graueri* and *Campephaga petiti – C. flava*
[3]) With superspecies *Muscicapa olivascens — M. lendu* and *Terpsiphone rufiventer — T. bedfordi* (Prigogine, 1976)
[4]) With superspecies *Ploceus melanogaster – P. nigricollis – P. ocularis, Ploceus insignis – P. dorsomaculatus – P. preussi* and *Cryptospiza reichenovii – C. salvadorii.*
[5]) *Phyllastrephus lorenzi* is not considered as a member of a superspecies
[6]) With *Cinnyricinclus sharpii – C. leucogaster*
[7]) *Apalis cinerea — Apalis alticola* are considered within a superspecies
[8]) *Turdus oberlaenderi, T. tanganjicae* and *T. piaggiae* are regarded as members of the same superspecies (Prigogine, 1977)

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Table 4: **Influence of altitude on the proportion of passerina species which are members of a superspecies**

Altitude in m	Number of species which are members of a superspecies	Number of species	Percentage
< 1000	50	131	38.2
1600–1800	48	91	52.7
2000–2200	38	69	55.0

Table 4 shows the influence of altitude on the number of species within a superspecies for the passerines, omitting two Palaearctic migrants and three species not counted as forest birds. It seems that, in the montane forest, the proportion of species which are members of a superspecies is higher than in lowland forest and this reflects the isolation of the montane habitats.

Endemism

The genera encountered in the Itombwe forest have been classified in three categories: genera endemic to continental Africa, genera endemic to continental Africa and continental islands (including Pemba Island), other genera (non-endemic). As may be seen from Table 5, the total of 152 genera, for the whole area, is distributed as follows: 51 genera endemic to continental Africa, 38 endemic to the continent and the continental islands,

Table 5: **Number of endemic genera**

Group	Total area			Altitude in m								
				< 1000			1600–1800			2000–2200		
	e	e+I	O	e	e+I	O	e	e+I	O	e	e+I	O
A	5		2	5		2			1			
B	4		12	4		9	2		6	1		5
C	1	1	1	1	1	1		1	1		1	1
D	12	11	19	11	11	18	4	10	10	5	7	11
A–D	22	12	34	21	12	30	6	11	18	6	8	17
E	29	26	29	21	24	23	16	17	24	11	10	22
Total	51	38	63	42	36	53	22	28	42	17	18	39
Total %	33.6	25.0	41.4	32.1	27.5	40.4	23.9	30.4	45.7	23.0	24.3	52.7

e: endemic to continental Africa; e+I: endemic to the continent and the continental islands; O: others (non-endemic)

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63 non-endemic genera. With increasing alitude, the proportion of the non-endemic genera increases from 40.4 to 52.7 %. For the non-passerines the number of non-endemic genera diminishes notably, as the altitude passes from 1000 to 1600–1800 m. In the montane forest, their number seems to remain constant. For the passerines the number of non-endemic genera seems independent of the altitude.

Table 6: **Number of endemic species**

Group	Total area					Altitude in m: < 1000					1600–1800				2000–2200		
	E	e	e+I	O	M	E	e	e+I	O	M	e	e+I	O	M	e	e+I	O
A		7					7				1						
B	1	15	5	1	2		11	5		2	6	3		1	3	2	1
C		6					5				2				2		
D	1	46	21	10		1	35	18	8		16	10	4		17	6	5
A–D	2	74	26	11	2	1	58	23	8	2	25	13	4	1	22	8	6
E	1	145	63	9		1	79	45	6		57	31	3		49	18	2
Total	3	219	89	20	2	2	137	68	14	2	82	44	7	1	71	26	8
Total %	0.9	65.8	26.7	6.0	6.0	0.9	61.4	30.5	6.3	0.9	61.2	32.8	5.2	0.8	67.6	24.8	7.6

E: endemic to area; e: endemic to continental Africa; e+I: endemic to the continent and the continental islands; O: others (non-endemic); M: migrants.

Table 6 gives the same information at the species level (see tables of appendix for more details). Species endemic to the area and Palaearctic migrants have been shown separately. Three species are endemic to the Itombwe forest: *Phodilus prigoginei, Schoutedenapus schoutedeni* and *Andropadus hallae* [1]). 218 species are endemic to continental Africa, 89 to the continent and the continental islands; 20 species are non-endemic and two are migrants. It appears from Table 6 that the proportion of endemic species (to the area, to the continent with the continental islands) is independent of the altitude:

Altitude in m	% endemics
< 1000	92.8
1600 – 1800	94.0
2000 – 2200	92.4

[1]) Only the type of *A. hallae* has been collected and this species requires further confirmation.

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The proportion of endemic non-passerines relative to the total number of endemic species seems higher in the lowland forest than in montane forest, where its value seems constant:

Altitude in m	% endemic non-passerines
< 1000	39.6
1600 – 1800	30.2
2000 – 2200	30.9

Corresponding values were obtained for the percentage of passerine birds.

The appendix (Table A.1) shows that in the Itombwe forest 116 taxa belong to the categories TF, MF, MF+Al and Al. Yet all the taxa are not typical montane forest species. For this category of birds the total number is 81, including *Oriolus percivali* and *Estrilda kandti* (which possibly are only semi-species). The montane areas along the Central African Rift

Table 7: **Endemics in montane and transition forests along the Albertine Rift**

Francolinus nobilis	*Batis diops*
Tauraco johnstoni	*Alethe poliophrys*
Phodilus prigoginei	*Dessonornis archeri*
Pseudocalyptomena graueri	*Turdus tanganjicae*
Prionops alberti	*Lioptilus chapini*
Coracina graueri	*Lioptilus rufocinctus*
Graueria vittata	*Parus fasciiventer*
Hemitesia neumanni	*Nectarinia alinae*
Apalis argentea	*Nectarinia regia*
Apalis kaboboensis	*Nectarinia rockefelleri*
Apalis ruwenzorii	*Nectarinia purpureiventris*
Bradypterus graueri	*Ploceus alienus*
Phylloscopus laetus	*Cryptospiza jacksoni*
Melaenornis ardesiaca	*Cryptospiza shelleyi*

Valley include Mt. Kungwe and the Marungu Highlands too and these are mentioned by Moreau (1966) as "East Congo mountains". The Ufipa Plateau is considered to be a transitional area between the East Congo and the Tanganyika-Nyasa groups (Dowsett & Prigogine, 1974) and its avifauna is not included in this comparison. The following species, present in some of these montane forests, are absent from the Itombwe: *Apalis argentea, Apalis kaboboensis, Apalis pulchra, Bradypterus graueri, Phylloscopus ruficapillus,* and *Nectarinia mediocris.* The recently discovered *Chlorocichla prigoginei* seems not to belong to this category of birds, as it is confined to thickets and not to forest. Thus, the Itombwe forest contains 81 typical stenotopic species from a total of 87 species, i. e. 92.0 %. If we consider only endemics in the transition and montane forests along the

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Albertine Rift, amounting to 28 species (Table 7), we find 25 of them, i. e. 90 %, in the Itombwe forest. This high number of typically montane forest species, which is probably correlated with the great extension of the forest biome in the region investigated and its geographically central position (Moreau, 1966), shows that the Itombwe range is a center of montane speciation.

It must be emphasized that the conclusions, which can be derived from the influence of the altitude on the forest avifauna, are only valid for the area investigated. Only a comparison with other regions can show, whether some of the conclusions arrived at for the Itombwe avifauna are more generally valid.

Appendix

Table A. 1: **Composition of the forest bird fauna by families**

Family	genera	species	Endemics to						Forest					
			area	continent	cont. + I.	others	migrants	LF	LF+MF	TF	MF	M+Al	Al
Anatidae	1	1		1				1					
Ardeidae	1	1		1				1					
Heliornithidae	1	1		1				1					
Rallidae	3	3		3				3					
Threskiornithidae	1	1		1					1				
Group A (5 fam.)	7	7		7				6	1				
Accipitridae	9	15		10	3		2	8	5				2
Strigidae	7	9	1	5	2	1		3	2		4		
Group B (2 fam.)	16	24	1	15	5	1	2	11	7		4	2	
Phasianidae	3	6		6				3	2		1		
Group C (1 fam.)	3	6		6				3	2		1		
Alcedinidae	3	6		2	2	2		6					
Apodidae	2	3	1	1	1			2	1				
Bucerotidae	4	7		5	2			5			2		
Capitonidae	5	10		7	3			6	3				1
Caprimulgidae	1	2		2				1					1
Columbidae	5	10		4	1	5		3	4		3		
Coraciidae	1	1			1			1					
Cuculidae	6	10		6	2	2		5	4		1		
Indicatoridae	4	8		7	1			4	3		1		
Meropidae	1	3		2	1			1	1		1		
Musophagidae	2	3		2	1				2		1		

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Family	genera	species	Endemics to: area	continent	cont.+I.	others	migrants	Forest: LF	LF+MF	TF	MF	MF+Al	Al
Picidae	4	10		6	4			5	1	1	2	1	
Psittacidae	2	2		1		1			1		1		
Trogonidae	1	2			2				1		1		
Upupidae	1	1		1					1				
Group D (15 fam.)	42	78	1	46	21	10		39	22	1	13	3	
Groups A–D (23 fam.)	68	115	2	74	26	11	2	59	32	1	18	5	
Campephagidae	2	6		5	1			2		2	2		
Dicruridae	1	2		1		1		1	1				
Eurylaimidae	2	4		3	1			1		1	2		
Fringillidae	2	3		2	1						2	1	
Hirundinidae	2	3		3				2			1		
Laniidae	4	12		11	1			2	3	2	5		
Muscicapidae	12	28		20	7	1		16	3	2	7		
Nectariniidae	2	23		12	9	2		11	4		5	3	
Oriolidae	1	2		2				1			1		
Paridae	2	3		3				1	1		1		
Ploceidae	9	33		20	12	1		17	6	2	8		
Prionopidae	1	2		2				1		1			
Pycnonotidae	10	29	1	19	9			16	6	4	3		
Sturnidae	4	8		4	2	2		3	1		4		
Sylviidae	16	31		21	9	1		10	6	1	9	4	1
Timaliidae	3	8		5	3			2	1	1	3	1	
Turdidae	10	20		12	7	1		7	1	3	8	1	
Zosteropidae	1	1			1							1	
Group E (18 fam.)	84	218	1	145	63	9		93	33	19	61	11	1
Total (41 fam.)	152	333	3	219	89	20	2	152	65	20	79	16	1

I: Continental islands
LF: Lowland forest
LF+MF: Lowland and montane forest
TF: Transition forest
MF: Montane forest
MF+Al: Montane forest and sub-alpine zone
Al: Sub-alpine zone

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Table A. 2: **Composition of the forest bird fauna by families for altitudes up to 1000 m**

Family	genera	species	Endemics to			others	migrants	Forest		
			area	continent	cont.+I.			LF	LF+MF	TF
Anatidae	1	1		1				1		
Ardeidae	1	1		1				1		
Heliornithidae	1	1		1				1		
Rallidae	3	3		3				3		
Threskiornithidae	1	1		1					1	
Group A (5 fam.)	7	7		7				6	1	
Accipitridae	9	13		8	3		2	8	5	
Strigidae	4	5		3	2			3	2	
Group B (2 fam.)	13	18		11	5		2	11	7	
Phasianidae	3	5		5				3	2	
Group C (1 fam.)	3	5		5				3	2	
Alcedinidae	3	6		2	2	2		6		
Apodidae	2	3	1	1	1			2	1	
Bucerotidae	4	7		3	1			3	4	
Capitonidae	5	9		6	3			6	3	
Caprimulgidae	1	1		1				1		
Columbidae	4	7		3	1	3		3	4	
Coraciidae	1	1			1			1		
Cuculidae	6	9		5	2	2		5	4	
Indicatoridae	4	7		6	1			4	3	
Meropidae	1	2		1	1			1	1	
Musophagidae	2	2		1	1				2	
Picidae	4	7		4	3			5	1	1
Psittacidae	1	1				1			1	
Trogonidae	1	1			1				1	
Upupidae	1	1		1					1	
Group D (15 fam.)	40	62	1	35	18	8		39	22	1
Groups A–D (23 fam.)	63	92	1	58	23	7	2	59	32	1
Campephagidae	2	2		2				2		
Dicruridae	1	2		1		1		1	1	
Eurylaimidae	1	2		1	1			1		1
Hirundinidae	2	2		2				2		
Laniidae	4	6		6				2	3	1
Muscicapidae	11	20		14	5	1		16	3	1
Nectariniidae	2	15		5	8	2		11	4	
Oriolidae	1	1		1				1		

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Family	genera	species	Endemics to area	Endemics to continent	Endemics to cont.+I.	others	migrants	Forest LF	Forest LF+MF	Forest TF
Paridae	2	2		2				1	1	
Ploceidae	8	23		14	9			17	6	
Prionopidae	1	1		1				1		
Pycnonotidae	10	23	1	14	8			16	6	1
Sturnidae	3	4		1	1	2		3	1	
Sylviidae	12	17		10	7			10	6	1
Timaliidae	1	3		2	1			2	1	
Turdidae	7	8		3	5			7	1	
Group E (16 fam.)	68	131	1	79	45	6		93	33	5
Total (39 fam.)	131	223	2	137	68	14	2	152	65	6

I: Continental islands
LF: Lowland forest
LF+MF: Lowland and montane forest
TF: Transition forest

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Table A. 3: **Composition of the forest bird fauna by families for altitudinal limits 1600–1800 m**

Family	genera	species	Endemics to area	Endemics to continent	Endemics to cont.+I.	others	migrants	Forest LF+MF	Forest TF	Forest MF
Threskiornithidae	1	1		1				1		
Group A (1 fam.)	1	1		1				1		
Accipitridae	5	6		4	1		1	5		1
Strigidae	3	4		2	2			2		2
Group B (2 fam.)	8	10		6	3		1	7		3
Phasianidae	2	2		2				1		1
Group C (1 fam.)	2	2		2				1		1
Apodidae	1	1		1				1		
Capitonidae	3	4		3	1			3		1
Columbidae	5	6		2	1	3		4		2
Cuculidae	4	5		3	2			4		1
Indicatoridae	2	3		2	1			3		
Meropidae	1	2		1	1			1		1
Musophagidae	2	3		2	1			2		1
Picidae	3	3		1	2				1	2
Psittacidae	1	1				1		1		
Trogonidae	1	1			1					1
Upupidae	1	1		1				1		
Group D (11 fam.)	24	30		16	10	4		20	1	9
Groups A–D (15 fam.)	35	43		25	13	4	1	29	1	13
Campephagidae	2	3		2	1				1	2
Eurylaimidae	2	2		2						2
Fringillidae	2	2		1	1					2
Hirundinidae	1	1		1						1
Laniidae	4	8		7	1			3	2	3
Muscicapidae	7	9		6	3			2	2	5
Nectariniidae	2	7		2	3	2		4		3
Oriolidae	1	1		1						1
Paridae	1	1		1				1		
Ploceidae	6	10		5	5			5		5
Prionopidae	1	1		1					1	
Pycnonotidae	3	10		5	5			5	2	3
Sturnidae	3	3		2	1					3
Sylviidae	12	17		12	5			6	1	10
Timaliidae	3	6		3	3			1	1	4
Turdidae	6	9		6	2	1			2	7
Zosteropidae	1	1			1					1
Group E (17 fam.)	57	91		57	31	3		27	12	52
Total (32 fam.)	92	134		82	44	7	1	55	13	65

I: Continental islands
LF+MF: Lowland and montane forest
TF: Transition forest
MF: Montane forest

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Table A. 4: **Composition of the forest bird fauna by families for altitudinal limits 2000–2200 m**

Family	genera	species	Endemics to area	Endemics to continent	Endemics to cont. + I.	others	migrants	Forest LF+MF	Forest TF	Forest MF
Accipitridae	3	3		2	1			2		1
Strigidae	3	3		1	1	1		1		2
Group B (2 fam.)	6	6		3	2	1		3		3
Phasianidae	2	2		2				1		1
Group C (1 fam.)	2	2		2				1		1
Bucerotidae	1	1		1						1
Capitonidae	2	3		2	1			2		1
Caprimulgidae	1	1		1						1
Columbidae	5	6		1	1	4		3		3
Cuculidae	3	3		2	1			2		1
Indicatoridae	2	4		3	1			3		1
Meropidae	1	1		1						1
Musophagidae	1	2		2				1		1
Picidae	3	3		2	1					3
Psittacidae	2	2		1		1		1		1
Trogonidae	1	1			1					1
Upupidae	1	1		1				1		
Group D (12 fam.)	23	28		17	6	5		13		15
Groups A–D (15 fam.)	31	36		22	8	6		17		19
Campephagidae	1	1			1					1
Eurylaimidae	2	2		2						2
Fringillidae	2	3		2	1					3
Laniidae	4	6		5	1			1		5
Muscicapidae	4	6		4	2			1		5
Nectariniidae	2	7		5	1	1		1		6
Oriolidae	1	1		1						1
Paridae	1	2		2				1		1
Ploceidae	4	6		3	3			3		3
Pycnonotidae	2	5		3	2			1	1	3
Sturnidae	2	3		2	1					3
Sylviidae	9	14		12	2			1		13
Timaliidae	3	4		2	2					4
Turdidae	5	8		6	1	1				8
Zosteropidae	1	1			1					1
Group E (15 fam.)	43	69		49	18	2		9	1	59
Total (30 fam.)	74	105		71	26	8		26	1	78

I: Continental islands
LF+MF: Lowland and montane forest
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Summary

The avifauna of the Itombwe Forest, situated northwest of Lake Tanganika, has been statistically evaluated. This was not only done for the whole forest area, but for three altitudinal zones as well.

Several tables indicate the number of families, genera and species present and the number of species per genus and per superspecies. Two other tables give the number of endemic genera and endemic species. The influence of the altitude on the composition of the avifauna is shown.

Résumé

Des statistiques ont été établies pour la composition de l'avifaune de la forêt de l'Itombwe, au nord-ouest du lac Tanganika, ainsi que des endémismes rencontrés. Ces renseignements sont donnés pour la forêt prise dans son ensemble et pour trois niveaux altitudinaux.

Le nombre de familles, generes et espèces, le nombre d'espèces par genre et par superespèce sont indiqués dans plusieurs tableaux.

Deux tableaux supplémentaires montrent le nombre d'endémismes au niveau du genre et au niveau de l'espèce.

L'influence de l'altitude sur la composition de l'avifaune est indiquée.

Zusammenfassung

Die Zusammensetzung der Avifauna des Itombwe-Waldes im Nordwesten des Tanganyika-Sees und die dort vorkommenden Endemismen werden statistisch erfaßt. Entsprechende Angaben werden für das Waldgebiet in seiner Gesamtheit und auch für drei verschiedene Höhenstufen gemacht.

Die Anzahl der Familien, Gattungen und Arten und die Zahl der Arten je Gattung und Superspezies werden auf mehreren Tabellen dargestellt.

Zwei weitere Tabellen zeigen die Anzahl der endemischen Gattungen und die der endemischen Arten.

Der Einfluß der Höhenlage auf die Zusammensetzung der Avifauna wird aufgezeigt.

References

Chapin, J. P. (1932): The birds of the Belgian Congo, part 1. Bull. Amer. Mus. Nat. Hist. 65: 1–756.

Dowsett, R. J., and A. Prigogine (1974): The avifauna of the Marungu Highlands. In: J.-J. Symoens, Hydrobiological survey of the lake Bangweulu Luapula river basin, volume 19, Bruxelles.

Hall, B. P., and R. E. Moreau (1970): An atlas of speciation in African Passerine birds, London.

Moreau, R. E. (1966): The bird faunas of Africa and its islands. New York London.

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Prigogine, A. (1971): Les oiseaux de l'Itombwe et de son hinterland. Volume I. Ann. Mus. Afr. Centr., 8°, Sc. zool. 185: 1—298.

— (« 1974 » = 1976). Contribution à la distribution verticale des oiseaux orophiles. Gerfaut 64: 75–88.

— (« 1976 » = 1977). Relations entre les gobe-mouches de paradis *Terpsiphone rufiventer ignea* et *Terpsiphone bedfordi* et statut de ce dernier. Gerfaut 66: 171–205.

— (1977): The Orange Ground-Thrush *Turdus tanganjicae* (Sassi) a valid species. Bull. Brit. Orn. Cl. 97: 10–15.

— (In press a): Les oiseaux de l'Itombwe et de son hinterland. Volume II. Ann. Mus. Afr. Centr.

— (In press b): The altitudinal distribution of the avifauna in the Itombwe forest (Zaire). Fourth Pan-African Orn. Congress 1976.

White, C. M. N. (1965): A revised check list of African Non-passerine birds. Lusaka

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Zeitschrift/Journal: Bonn zoological Bulletin - früher Bonner Zoologische Beiträge.

Jahr/Year: 1977

Band/Volume: 28

Autor(en)/Author(s): Prigogine Alexandre

Artikel/Article: The composition of Itombwe forest's avifauna 369-383