Supplementary material 1

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The Importance of Forest Elephants for Vegetation Structure Modification and Its Influence on the Bird Community of a Mid-Elevation Forest on Mount Cameroon, West-Central Africa

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Table S1. Abundances of the species from field survey and after correction using distance sampling method.

Species	Field abundance	Corrected abundances	Difference
Cyanomitra oritis	1.73 ± 0.96	9.24 ± 5.13	7.51
Alethe castanea	1.00 ± 0.00	1.24 ± 0.00	0.24
Anthodiaeta collaris	1.85 ± 0.37	5.92 ± 1.20	4.07
Anthreptes rectirostris	1.50 ± 0.57	1.50 ± 0.58	0.00
Apalis cinerea	2.88 ± 1.36	7.45 ± 3.53	4.57
Arizelocichla tephrolaema	3.40 ± 1.55	11.44 ± 5.24	8.04
Bradypterus lopezi	2.57 ± 1.10	2.98 ± 1.28	0.41
Chrysococcyx cupreus	1.16 ± 0.40	2.05 ± 0.72	0.89
Cinnyris reichenowi	1.97 ± 1.21	7.18 ± 4.44	5.21
Cinnyris ursulae	1.33 ± 0.57	1.33 ± 0.58	0.00
Cisticola chubbi	4.02 ± 1.52	12.64 ± 4.78	8.62
Columba sjostedti	2.21 ± 1.12	5.15 ± 2.62	2.94
Coracina caesia	1.25 ± 0.46	1.59 ± 0.59	0.34
Crithaga burtoni	1.00 ± 0.00	1.00 ± 0.00	0.00
Corythaeola cristata	1.33 ± 0.57	1.33 ± 0.58	0.00
Cossypha isabellae	1.56 ± 0.72	3.39 ± 1.58	1.83
Cryptospiza reichnovii	1.00 ± 0.00	1.00 ± 0.00	0.00
Cyanomitra olivacea	1.00 ± 0.00	1.00 ± 0.00	0.00
Dicrurus modestus	1.20 ± 0.44	1.20 ± 0.45	0.00
Elminia albiventris	1.94 ± 1.12	4.96 ± 2.88	3.02
Eurillas latirostris	1.00 ± 0.00	1.00 ± 0.00	0.00
Eurillas virens	1.60 ± 0.54	1.60 ± 0.55	0.00
Gymnobucco calvus	2.00 ± 1.00	2.00 ± 1.00	0.00
Kakamega poliothorax	1.84 ± 0.71	2.34 ± 0.91	0.50
Laniarus atroflavus	1.92 ± 0.76	3.25 ± 1.29	1.33
Laniarus poensis	1.65 ± 1.01	4.03 ± 2.48	2.38
Linurgus olivaceus	2.20 ± 1.14	5.24 ± 2.71	3.04
Malaconotus gladiator	1.20 ± 0.42	1.20 ± 0.42	0.00
Mesopicos elliotii	1.00 ± 0.00	1.87 ± 0.00	0.87
Muscicapa adusta	1.60 ± 0.74	4.02 ± 1.84	2.42
Neocossyphus poensis	1.00 ± 0.00	1.00 ± 0.00	0.00
Nesocharis shelleyi	3.59 ± 3.38	8.59 ± 8.11	5.00
Nigrita canicapillus	1.20 ± 0.42	1.29 ± 0.45	0.09
Onychognathus walleri	3.67 ± 2.25	12.72 ± 7.81	9.05
Oriolus brachyrhynchus	1.66 ± 0.57	1.67 ± 0.58	0.01
Oriolus nigripennis	1.31 ± 0.74	2.32 ± 1.32	1.01
Phyllastrephus poensis	2.00 ± 0.81	2.28 ± 0.93	0.28
Platysteira cyanea	1.76 ± 0.72	1.76 ± 0.72	0.00

Ploceus insignis	2.00 ± 0.81	3.29 ± 1.34	1.29
Ploceus melanogaster	1.89 ± 0.73	1.89 ± 0.74	0.00
Ploceus weynsi	1.88 ± 0.99	6.27 ± 2.74	4.39
Pogoniulus bilineatus	1.51 ± 0.56	1.52 ± 0.57	0.01
Pogoniulus coryphaei	1.48 ± 0.64	1.68 ± 0.73	0.20
Poliolais lopezi	1.33 ± 0.48	1.98 ± 0.71	0.65
Prinia bairdii	2.45 ± 1.03	6.48 ± 2.74	4.03
Psalidoprocne fuliginosa	4.25 ± 2.75	4.25 ± 2.75	0.00
Psalidoprocne nitens	1.40 ± 0.54	1.20 ± 0.45	-0.20
Pseudoalcipe abyssinica	2.35 ± 1.38	6.53 ± 3.86	4.18
Pternistis camerunensis	2.00 ± 1.00	2.00 ± 1.00	0.00
Pycnonotus barbatus	1.57 ± 0.74	2.54 ± 1.21	0.97
Tauraco macrorhynchus	3.00 ± 1.23	6.70 ± 2.77	3.70
Trachyaemus purpuratus	1.08 ± 0.28	2.62 ± 0.70	1.54
Treron calvus	1.88 ± 1.65	13.67 ± 12.01	11.79
Tricholaema hirsuta	1.09 ± 0.30	3.36 ± 0.93	2.27
Turdus pelios	2.46 ± 1.36	9.44 ± 5.23	6.98
Turtur tympanistria	1.33 ± 0.65	5.05 ± 2.47	3.72
Urolais epichlorus	2.78 ± 1.33	7.40 ± 3.55	4.62
Zosterops senegalensis	2.46 ± 1.14	5.42 ± 2.51	2.96

Table S2. Results of GLM analyses on the effect of fog (0/1) on the detectability of each species (0/1). Statistically significant (P < 0.05) and marginally significant (P < 0.10) are in bold.

Scientific name	D.f.	% of explained variability	Chi	P
Cyanomitra oritis	49	0.75	0.53	0.460
Alethe castanea	1	<0.01	0.00	1.000
Anthodiaeta collaris	5	<0.01	0.00	1.000
Anthreptes rectorostris	1	27.29	1.04	0.300
Apalis cinerea	62	2.08	0.92	0.330
Arizelocichla tephrolaema	81	0.82	0.86	0.350
Bradypterus lopezi	64	13.78	2.47	0.110
Chrysococcyx cupreus	7	<0.01	0.00	1.000
Cinnyris reichenowi	49	0.08	0.05	0.810
Cinnyris ursulae	2	31.04	1.72	0.180
Cisticola chubby	62	0.03	0.02	0.870
Columba sjostedti	46	0.19	0.13	0.710
Coracina caesia	7	0.72	0.09	0.760
Crithagra burtoni	1	27.29	1.04	0.300
Corythaeola cristata	2	38.30	1.72	0.180
Cossypha isabellae	43	6.79	3.40	**0.060**
Cryptospiza reichenovii	1	27.29	1.04	0.300
Dicrurus modestus	3	<0.01	2.91	**0.080**
Elminia albiventris	22	1.87	0.62	0.430
Eurillas latirostris	4	<0.01	0.00	1.000
Gymnobucco calvus	13	23.65	3.55	**0.005**
Kakamega poliothorax	63	15.75	3.83	**0.050**
Laniarus atroflavus	44	15.05	3.34	**0.060**
Laniarus poensis	36	12.98	1.20	0.200
Linurgus olivaceus	29	1.37	0.42	0.500
Malaconotus gladiator	8	<0.01	0.00	1.000
Mesopicos elliotii	7	28.38	1.78	**0.100**
Muscicapa adusta	8	22.92	1.49	0.220
Neocossyphus poensis	1	<0.01	0.00	1.000
Nesocharis shelleyi	30	0.09	0.04	0.830
Nigrita canicapillus	9	14.32	0.96	0.320
Onychognathus walleri	48	0.01	0.01	0.880
Oriolus brachyrhynchus	1	<0.01	0.00	1.000
Oriolus nigripennis	20	0.05	0.01	0.900

Phyllastrephus poliocephalus	11	24.64	3.46	**0.060**
Platysteira cyanea	33	<0.01	0.00	1.000
Ploceus insignis	37	0.01	0.00	0.950
Ploceus melanogaster	23	2.26	0.67	0.410
Pogoniulus bilineatus	40	<0.01	0.00	1.000
Pogoniulus coryphaea	37	0.19	0.03	0.850
Poliolais lopezi	31	0.99	0.20	0.650
Prinia bairdii	12	<0.01	0.00	1.000
Psalidoprocne fuliginosa	4	48.70	2.63	**0.100**
Psalidoprocne nitens	3	<0.01	0.00	1.000
Pseudoalcipe abyssinica	63	1.56	0.38	0.530
Pternistis camerunensis	1	<0.01	0.00	1.000
Pycnonotus barbatus	21	2.90	0.70	0.400
Tauraco macrorhynchus	76	0.77	0.46	0.490
Trachylaemus purpuratus	12	<0.01	0.00	1.000
Treron calvus	19	0.75	0.13	0.710
Tricholaema hirsute	9	14.32	0.96	0.320
Turdus pelios	45	0.84	0.51	0.470
Urolais epichlorus	61	5.96	2.62	**0.100**
Zosterops senegalensis	57	3.73	1.88	0.160

Table S3. Summary of species observations relative to fog presence.

			No fog	Fog
Velvet mantled drongo	*Dicrurus modestus*	Not seen	1	2
		Seen	2	0
Naked face barbet	*Gymnobucco calvus*	Not seen	10	3
		Seen	3	0
Grey chested illadopsis	*Kakamega poliothorax*	Not seen	32	30
		Seen	3	0
Yellow breasted boubou	*Laniarus atroflavus*	Not seen	20	24
		Seen	0	3
Grey headed greenbul	*Phyllastrephus poliocephalus*	Not seen	4	3
		Seen	0	1
Mountain robin chat	*Cossypha isabellae*	Not seen	11	9
		Seen	1	6