

SUDAN GOVERNMENT

CATALOGUE OF
SUDAN BIRDS

BASED ON THE COLLECTION IN THE
SUDAN GOVERNMENT MUSEUM
(NATURAL HISTORY)

BY

W. WEDGWOOD BOWEN, B.A.(Cantab.), M.B.O.U.,
DEPUTY CURATOR, SUDAN GOVERNMENT MUSEUM (N. H.)

PART I.—STRUTHIONIDÆ to PICIDÆ.

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PREFACE.

Some twenty odd years ago an official of the Sudan Government, in writing an introduction to a catalogue of Sudan Flowering Plants, quoted the proverb "Half a loaf is better than no bread." I am tempted to copy his example in this preface to a catalogue of Sudan Birds, for I know that there are many looking for a comprehensive and well illustrated book on this subject rather than a catalogue. To visitors, as well as to residents, the beauty and variety of the birds are among the most striking features of the country, and I am frequently asked whether there is not some book which would enable the interested person to identify the birds he sees and to know what he may expect to see in any given locality. The production of a well illustrated book is beyond our resources, but, in preparing this catalogue, Mr. Bowen has included not only a list of the birds known to occur in the Sudan, but also indications as to their distribution and relative abundance, together with keys to the families and species. By means of these keys, and with the aid of occasional visits to the bird room of the Sudan Government Museum, the amateur should have no great difficulty in recognising the birds of his district. Further, the catalogue is intended to serve as a guide to the exhibits in the bird room ; it should be noted that the serial number against each species in the list corresponds with the number borne by the examples of that species in the bird room.

It is not claimed that the catalogue is complete either as regards the species which occur in the Sudan or their distribution ; much remains to be learnt in both these directions. It is hoped that visitors and, more particularly, residents will endeavour to fill in the gaps in our knowledge by recording the occurrence of any bird outside the range given for it in the catalogue or any other observation of interest. The most convenient medium in which such an observation may be recorded is "Sudan Notes and Records."

The preparation of this catalogue has already occupied many hours of Mr. Bowen's spare time during the last two years, for it has been entirely a "spare time job." It is being published in two parts ; the first comprising all families except the Passeres will, it is hoped, be followed very shortly by the second, the manuscript of which is in course of preparation.

KHARTOUM,

13th May, 1926.

H. H. KING,

Curator,

Sudan Government Museum (Natural History).

INTRODUCTION.

In the preparation of this catalogue the nomenclature and scheme of classification used by Sclater in the "*Systema Avium Ethiopicarum*" has been, except in one or two minor instances, closely followed. By so doing not only have all questions of priority and synonymy been avoided, but also it is hoped uniformity between this and other African bird lists will result.

For the purpose of identification synoptic keys, giving characters by which each species may be recognised, have been drawn up. These, in many cases, have been taken either wholly or in part from other works, and where this has been done acknowledgment is made in a footnote. While using these keys it must be remembered that not only are they wholly artificial and in many cases unscientific, but also that they apply only to the birds of the Sudan, and would be merely misleading elsewhere. Even within this country identifications made by their means should be viewed with a certain amount of reserve, since there is always the possibility, in a country of such vast dimensions, of species not previously recorded, or even of species new to science, appearing. In spite of these drawbacks it is hoped that the keys may be of some definite help to those desirous of adding to their knowledge of the bird-life around them. A few minutes study of the diagram (Plate I) showing the names of the various parts of a bird should suffice to make clear any technical names which have been found unavoidable. The measurements given are taken as follows :—

TOTAL LENGTH—from tip of bill to tip of tail. (This is seldom made use of, since it can only be taken from a bird "in the flesh.")

WING—from the "shoulder" or "bend of the wing" to the tip. Measured, in the case of small birds, with a ruler placed along the under side and pressed close against the wing; in big birds, by means of a tape stretched along the outside.

DIFFERENCE BETWEEN PRIMARIES AND SECONDARIES—The difference between the whole wing, as measured above, and the measurement from the "shoulder" to tip of secondaries.

BILL—Measured from base of feathering to tip, in a straight line along the culmen, or, in the case of birds with a cere, from the point of junction of cere and bill to the tip.

TARSUS and TOES—as indicated in Plate I.

An attempt has been made to indicate, as briefly as possible, the status, distribution and relative abundance of each species. Two points here seem to require explanation.

(I) **DISTRIBUTION** is given in reference to the map (Plate II), which purposed to represent, as far as possible, natural avifaunal districts. In its main divisions (indicated by the broad red lines) this map is, except for modifications in two points, a repetition of a small portion of the Avifaunal Map of the Ethiopian Region, as propounded by Mr. J. P. Chapin (American Naturalist, Vol. LVII, No. 649) and modified slightly by Admiral Lynes (Ibis, 1925, p. 761, and 1926, Pl. VIII). The points of difference are :—

(a) The extension northwards of the Sudanese Arid District to include the Nile Valley as far as Halfa. This, I think, is justified by the information and material collected by Mr. H. H. King in Dongola Province.

(b) The exclusion, from the Sudanese Savana District, of a large tract of land known locally as the “Sudd.” This is a flat, treeless plain, the greater part of which consists of permanent papyrus swamp, the remainder, in summer, swampy and covered by impenetrable tall grass is, in winter, a bare, inhospitable, sun-baked plain. Whereas a few birds (*Balaeniceps* and some marsh-owls and *Cisticolae*) might be said to be characteristic, its chief distinction from the surrounding savana lies in its almost complete absence of bird life. On the map I have indicated it by a broken line because, although from the narrower view point necessarily taken here in dealing with a small portion of the continent, it is of some importance, from the broader aspect with which alone Mr. Chapin was concerned, the separation of it from the surrounding savana would be as superfluous as the separation of Lake Victoria from its enclosing East African Highland District, and both must, to my mind, be regarded rather as patches of neutral ground within each district, than as independent districts or sub-districts.

As was emphasised by Mr. Chapin, the drawing of lines separating one district from another is purely arbitrary, since, in Africa where there are few natural boundaries, each district grades imperceptibly into the

one next to it, and many species will seemingly transgress the limits laid down for them. "A broad band of colour," as Mr. Chapin explains, "fading imperceptibly towards its edges, might carry a truer picture of actual changes."

(II) RELATIVE ABUNDANCE. The following scale has been adopted :

- rare.
- not common.
- fairly common.
- common.
- very common.
- abundant.

In furnishing the data of the specimens in the Sudan Government Museum (N.H.) collection, abbreviations have been used where possible, viz. :—

An asterisk (*) placed before the S.G.M. number signifies that that specimen has been compared with specimens in the British Museum (Nat. Hist.).

The usual sex signs and abbreviations have been used, viz. :—

- | | |
|---------------------|---|
| ♂ = male. | nestl. = nestling. |
| ♀ = female. | T.E. or O.E. = testes or ovaries enlarged. |
| ♂? = sex not known. | T.S.E. or O.S.E. = testes or ovaries slightly enlarged. |
| j = juvenile. | |

The province is indicated in brackets after each locality by the following abbreviations :—

Ber.	...	Berber Province.
B.G.	...	Bahr el Ghazal Province.
B.N.	...	Blue Nile Province.
Dar.	...	Darfur Province.
Don.	...	Dongola Province.
Fung	...	Fung Province.
Hal.	...	Halfa Province.
Kas.	...	Kassala Province.
Kh.	...	Khartoum Province.
Kor.	...	Kordofan Province.
Mon.	...	Mongalla Province.
R.S.	...	Red Sea Province.
U.N.	...	Upper Nile Province.
W.N.	...	White Nile Province.

The collector's name is abbreviated as follows :—

A. C.	...	Mr. Abel Chapman.
A. L. B.	...	Mr. A. L. Butler.
A. S.	...	Archdeacon A. Shaw.
B. W. W.	...	Mr. B. W. Whitfeild.
C. C.	...	Major Cuthbert Christy, R.A.M.C. (T.F.).
E. H. M.	...	Mr. E. H. Macintosh.
G. A.	...	Mr. G. Aylmer.
G. F. M.	...	Mr. G. F. March.
H. B. J.	...	Mr. H. B. Johnston.
H. H. K.	...	Mr. H. H. King.
H. C. B.	...	Capt. H. C. Brocklehurst.
H. L.	...	Rear-Admiral Hubert Lynes, C.B., C.M.G.
H. W. B.	...	Mr. H. W. Bedford.
J. E. M. M.	...	Mr. J. E. M. Mellor.
J. H. M.	...	Mr. J. H. Miller.
J. H. R. Y.	...	Mr. J. H. R. Yardley.
J. N. C.	...	Mr. J. N. Cameron.
J. S. H.	...	Major J. Stephenson-Hamilton.
J. W. C.	...	Mr. J. W. Cowland.
M. H.	...	Mr. Marshall Holmes.
N. G. H.	...	Capt. N. G. Halhed.
P. M. L.	...	Major P. M. Larken.
R. C.	...	Mr. R. Cottam.
R. G. A.	...	Major R. G. Archibald, D.S.O.
R. K. W.	...	Mr. R. K. Winter.
R. S. G.	...	Mr. R. S. Gibson.
V. P. W.	...	Mr. V. P. Walley.
W. E. G.	...	Mr. W. E. Giffard.
W. H. M. P.	....	Capt. W. H. M. Pollen, M.C.
W. P. L.	...	Mr. W. P. Lowe.
W. R.	...	Mr. W. Rutledge.
W. W. B.	...	Mr. W. W. Bowen.

The taxidermist's name is indicated in brackets, thus :—

(A. L. B.)	...	Mr. A. L. Butler.
(Sheals)	...	Mr. J. Sheals, taxidermist, Belfast.
(R. C.)	...	Mr. R. Cottam.

I should like to take this opportunity to acknowledge the valuable help given me by Messrs. G. W. Grabham, Government Geologist, and A. A. R. Boyce, Director of Surveys, Sudan Government, in the preparation of the Avifaunal Map.

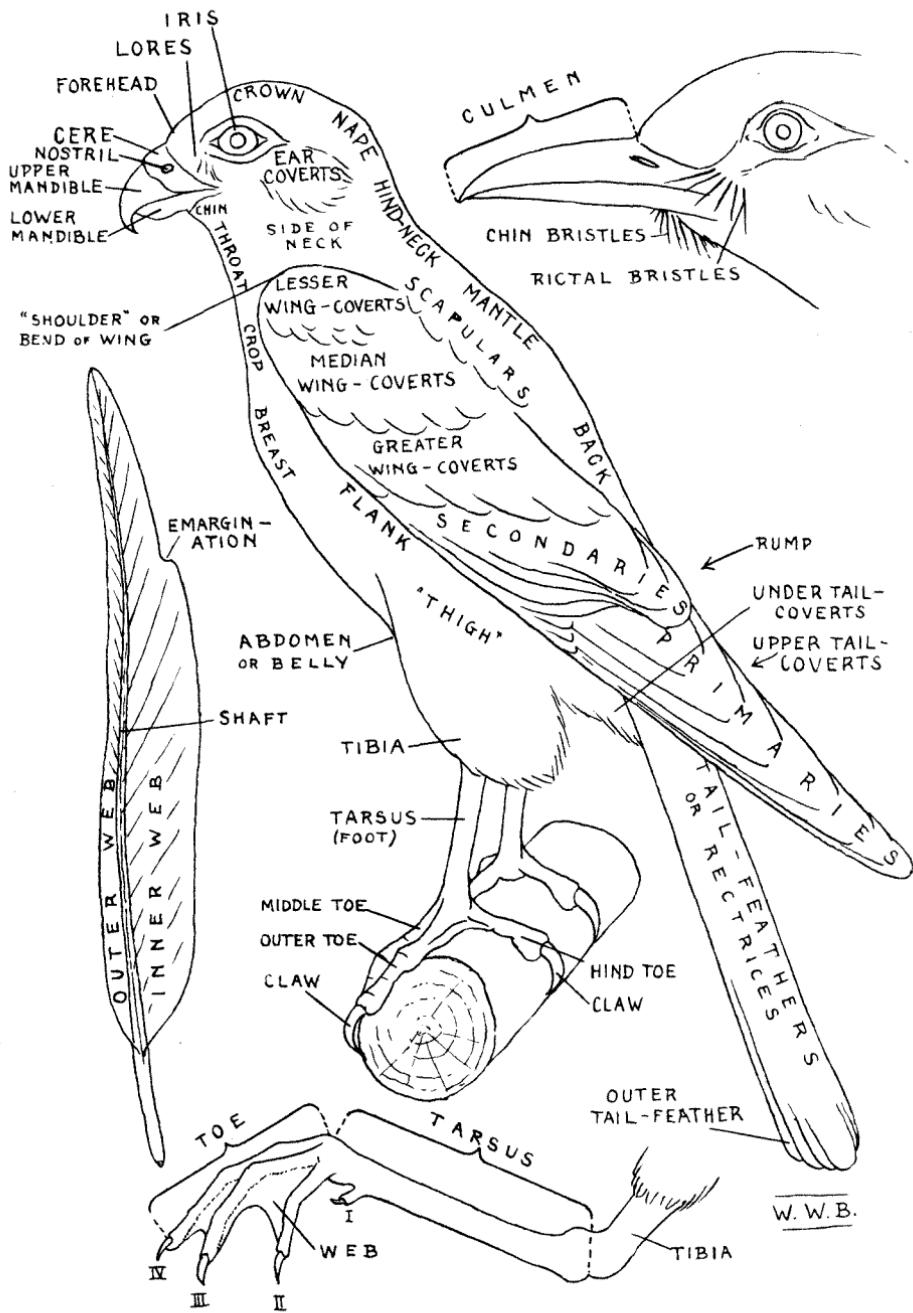
My thanks are due also to Mr. O. W. Snow, who has very kindly read through the typed manuscript and indicated a number of small errors, and to Mr. H. H. King, Curator of the Museum, who has been constantly ready with help and advice.

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PLATE I.

TOPOGRAPHY OF A BIRD SHOWING THE TERMS USED IN THIS CATALOGUE.



CATALOGUE OF SUDAN BIRDS.

KEY TO FAMILIES. ‡

1. { With two toes only *Struthionidae*, p. 17.
With three toes 2
With four toes 8
2. { Lower portion of shanks (tibia)
clothed with feathers *Turnicidae*, p. 48.
Lower portion of shanks naked 3
3. { Size large, wing over 11 ins. *Otididae*, p. 55.
Size smaller, wing under 10 ins. 4
4. { Tarsus covered with transverse scutes
behind 5
Tarsus covered with hexagonal, or
reticulate, scales behind 6
5. { Toes partly webbed *Glareolidae* (part), p. 68.
Toes not webbed *Scolopacidae* (part), p. 62.
6. { With a distinct swelling at tip of bill *Charadriidae*, (part), p. 57.
With no swelling at tip of bill ... 7
7. { Bill compressed and stout, longer
than tarsus *Charadriidae* (part), p. 57.
Bill slender and pointed, shorter than
tarsus but twice length of head ... *Recurvirostridae* (part), p. 61
Bill short and stout, not as long as
head *Burhinidae*, p. 70.
8. { All four toes turned forward and
completely webbed 9
All four toes with lateral lobe-like
expansions *Podicipidae*, p. 17.
Three front toes completely webbed,
hind toes free 12
All four toes free or only partly
webbed 13
9. { Middle tail-feathers greatly elongated;
nostrils distinct and pervious ... *Phaethontidae*, p. 18.
Middle tail-feathers not elongated;
nostrils more or less rudimentary ... 10
10. { Bill flattened *Pelecanidae*, p. 18.
Bill more or less cylindrical 11
11. { Tip of bill straight and sharp pointed;
wings long and pointed *Anhingidae*, p. 18.
Tip of bill hooked; wings short and
rounded *Phalacrocoracidae*, p. 18.
12. { Bill depressed and flattened, never
sharp pointed *Anatidae*, p. 27.
Bill bent downwards in the middle;
lower mandible fixed, upper
moveable *Phoenicopteridae*, p. 27.
Bill compressed or long and pointed *Laridae*, p. 71.

‡—After Stark and Slater, Birds of South Africa.

13. { Hind-toe raised at joint above the level of other toes 14
 { Hind-toe jointed at same level as other toes 26
14. { Lower portion of shanks (tibia) clothed with feathers 15
 { Lower portion of shanks naked ... 16
15. { Feet feathered to base of toes ... *Pteroclidiidæ*, p. 77.
 { Feet not feathered as far as toes ... *Phasianidæ*, p. 48.
16. { Toes very long, middle one longer than tarsus *Rallidæ*, p. 52.
 { Middle toe hardly ever equal to tarsus 17
17. { Size large (over 39 ins. in length) ... *Balearicidæ*, p. 54.
 { Size moderate (under 24 ins. in length) 18
18. { Tarsus covered in front by transverse scutes 19
 { Tarsus covered in front by hexagonal scales 25
19. { Tarsus covered behind by transverse scutes 20
 { Tarsus covered behind by reticulate scales 24
20. { Anterior toes partly webbed ... 21
 { Anterior toes not webbed ... 23
21. { Bill stout and strong 22
 { Bill slender *Scolopacidæ* (part), p. 62.
22. { Bill longer than head *Dromadidæ*, p. 70.
 { Bill about half length of head ... *Glareolidæ* (part), p. 68.
23. { Toes greatly longer than tarsus ... *Jacanidæ*, p. 54.
 { Toes never longer than tarsus ... *Scolopacidæ* (part), p. 62.
24. { Bill about as long as head *Charadriidæ* (part), p. 57.
 { Bill greatly longer than head ... *Scolopacidæ* (part), p. 62.
25. { Bill more than twice the length of middle toe and claw *Recurvirostridæ* (part), p. 61.
 { Bill about as long as middle toe and claw *Charadriidæ* (part), p. 57.
26. { Lower portion of shanks (tibia) naked 27
 { Whole of shanks, and often of tarsus, feathered 30
27. { Bill long and curved throughout, or flattened and spatulate at tip ... *Plegadidæ*, p. 25.
 { Bill large, broad and deep, with a distinct hooked "nail" at tip ... *Balaenicipitidæ*, p. 23.
 { Bill long and straight, the tip only sometimes slightly decurved ... 28
28. { A distinct basal web between all three anterior toes 29
 { A basal web between middle and outer toes only *Ardeidæ*, p. 19.
29. { Nape crested *Scopidæ*, p. 23.
 { Nape not crested *Ciconiidæ*, p. 24.

30. { A soft fleshy cere at base of bill ... 31
 { No cere 37
31. { Three toes forwardly, one backwardly,
 | directed 32
 { Two toes forwardly, two backwardly,
 | directed *Psittacidae*, p. 90.
 | Outer (or 4th) toe reversible at will 35
32. { Bill and claws strong, curved, hooked
 | and sharp pointed 33
 | Bill and claws weak and straight ... *Columbidæ*, p. 79.
33. { Legs very long, tarsus about half-length of wing *Sagittariidae*, p. 33.
 { Legs moderate, tarsus never a quarter the length of wing 34
34. { Crown of head naked, or covered with down *Egypiidæ*, p. 33.
 { Crown feathered *Falconidæ*, p. 34.
35. { Tarsus bare; eyes not directed forwards; no facial disc *Pandionidæ*, p. 47.
 { Tarsus feathered; eyes directed forwards; often with a distinct facial disc 36
36. { Claw of middle toe with a comb-like ridge (pectinated) *Tytonidæ*, p. 101.
 { Claw of middle toe not pectinated ... *Strigidæ*, p. 101.
37. { Feet with two toes forwardly and two backwardly directed 38
 { Feet with all four toes directed forward 43
 { Feet with three toes forwardly and one backwardly directed 44
38. { Tail with ten feathers 39
 { Tail with twelve feathers 41
39. { Wing with ten primaries 40
 { Wing with nine primaries *Indicatoridæ* (part), p. 114.
40. { With well developed bristles at base of bill and on chin *Capitonidæ*, p. 111.
 { No conspicuous bristles at base of bill or on chin *Cuculidæ*, p. 84.
41. { Tail longer than wing *Trogonidæ*, p. 111.
 { Tail shorter than wing 42
42. { Wing with nine primaries; first nearly as long as others *Indicatoridæ* (part), p. 114.
 { Wing with ten primaries; first short, about half-length of wing *Picidæ*, p. 115.
43. { Bill very small, but wide at gape; secondaries very short and less than nine in number *Micropodidæ*, p. 108.
 { Bill short and finch-like; secondaries medium and more than nine in number *Coliidæ*, p. 110.
44. { Mouth very large; bill small and weak *Caprimulgidæ*, p. 104.
 { Mouth not large; bill stronger ... 45

45. { Third and fourth toes united along
their basal joint, at least 46
Third and fourth toes quite free from
one another 51
46. { Sides of tarsus covered with two entire
longitudinal plates which meet in a
ridge behind *Passeres* (part), Part II, p.
Tarsus with no entire lateral plates ... 47
47. { Tail with ten feathers 48
Tail with twelve feathers 50
48. { Bill large and stout *Bucerotidae*, p. 99.
Bill long and slender 49
49. { Head crested *Upupidae*, p. 100. *
Head not crested *Phoeniculidae*, p. 100.
50. { Bill slender and curved; ten primaries *Meropidae*, p. 95.
Bill stout and straight; eleven
primaries *Alcedinidae*, p. 93.
51. { Sides of tarsus covered by two entire
longitudinal plates which meet in a
ridge behind *Passeres* (part), Part II, p.
Tarsus without entire lateral plates ... 52
52. { Fourth toe reversible at will 53
Fourth toe not reversible *Passeres* (part), Part II, p.
53. { Tail with twelve feathers *Coraciidae*, p. 91.
Tail with ten feathers... *Musophagidae*, p. 88.

Order - - **RATITÆ.**

Family *STRUTHIONIDÆ*.

1. NORTH AFRICAN OSTRICH.

Struthio camelus camelus Linn.

Resident—savana and arid (acacia-grass)—fairly common.

Order - - **COLYMBIFORMES.**

Sub-Order PODICIPIDES.

Family *PODICIPIDÆ*.

KEY TO SPECIES.†

Length about 12 ins. (wing about 5.5 ins.), a crest on crown of head and a bunch of elongated hair-like plumes behind eye in breeding plum- age	...	...	...	...	...	...	...	<i>Proctopus nigricollis</i> , 2.
	Length about 10 ins. (wing about 4.10 ins.) ; no crest	...	...	...	...	...	...	<i>Poliocephalus ruficollis</i> , 3.

2. AFRICAN BLACK-NECKED GREBE.

Proctopus nigricollis gurneyi Roberts.

Wanderer (?)—rare.

MOUNTED.

S.G.M. 1558, ♂, Khartoum, Nov., 1920, R.K.W. (R.C.).

3. AFRICAN LITTLE GREBE.

Poliocephalus ruficollis capensis (Salvad.)

Resident—rivers (south) ; spreading northwards in winter—fairly common.

MOUNTED.

S.G.M. 2983, ♂, Khartoum, Mar., 1925, B.W.W. (R.C.).

SKINS.

*S.G.M. 20, ♀, Khartoum, Feb., 1922, R.C.

S.G.M. 2982, ♀, Khartoum, Mar., 1925, B.W.W.

S.G.M. 891, ♂, Gerif (Kh.), Dec., 1921, B.W.W.

†—After Stark and Sclater, Birds of South Africa.

Order - - CICONIIFORMES.

Sub-Order STEGANOPODES.

Family PHAËTHONIDÆ.

4. SMALLER RED-BILLED TROPIC-BIRD.

Phaëthon indicus Hume.

Occasional wanderer to the northern half of the Red Sea. (?)

Family SULIDÆ.

5. BROWN BOOBY.

Sula leucogaster (Bodd.)

Resident—Red Sea—fairly common.

Family PHALACROCORACIDÆ.

KEY TO SPECIES.

Length about 35 ins., breast white	...	<i>Phalacrocorax carbo</i> , 6.
Length about 22 ins., breast blackish	...	<i>Phalacrocorax africanus</i> , 7.

6. RED SEA WHITE-BREASTED CORMORANT.

Phalacrocorax carbo lugubris (Rüpp.)

Resident—coast and rivers—not common.

7. LONG-TAILED CORMORANT.

Phalacrocorax africanus africanus (Gmel.)

Resident—coast and rivers—fairly common.

MOUNTED.

S.G.M. 1616, ♂, Khartoum, Dec., 1922, B.W.W. (R.C.).

S.G.M. 1562, ♂, Yei (Mon.), Dec., 1915, C.C. (R.C.).

Family ANHINGIDÆ.

8. AFRICAN DARTER, OR SNAKE-BIRD.

Anhingia rufa rufa Lacép. and Daudin.

Resident—coast and rivers (south, occasionally north)—fairly common.

SKINS.

S.G.M. 1677, ♀, Zeidab (Ber.), Sep., 1919, H.W.B.

Family PELECANIDÆ.

KEY TO SPECIES.

1.	{	Feathers of forehead terminating in a forwardly directed point; shafts of primaries white	...	...	...	...	2
		Feathers of forehead terminating in a concave line at base of bill; shafts of primaries horn-brown, white only at bases	...	...	...	...	<i>Pelecanus rufescens</i> , 11.
.	{	Size large, wing over 27 ins.	...	...	...	...	<i>Pelecanus onocrotalus</i> , 9.
		Size smaller, wing under 27 ins.	...	...	...	...	<i>Pelecanus roseus</i> , 10.

9. WHITE PELICAN.

Pelecanus onocrotalus Linn.

Winter visitor (resident?)—rivers—common.

10. EASTERN WHITE PELICAN.

Pelecanus roseus Gmel.

Winter visitor (resident?)—rivers—common.

11. PINK-BACKED PELICAN.

Pelecanus rufescens Gmel.

Resident—rivers (south, occasionally north)—fairly common.

Sub-Order ARDEÆ.

Family ARDEIDÆ.

KEY TO SPECIES. †

1. {
Plumage pure white, or with top of
head and crop ochre-yellow, or
washed with rust colour 14
Plumage not white 2
2. {
Wing 13.4 ins., or over 3
Wing under 13.4 ins. 6
3. {
Hind-neck white or grey *Ardea cinerea*, 12.
Hind-neck rufous brown 4
Hind-neck black, or at least a small
black band down centre 5
Hind-neck yellowish brown with
blackish zig-zag cross-bars... ... *Botaurus stellaris*, 28.
4. {
Wing over 19.7 ins. *Ardea goliath*, 14.
Wing under 19.7 ins. *Pyrrherodia purpurea*, 15
5. {
Middle- and hind-belly slaty black;
sides of breast rusty chestnut-brown;
thighs rusty brown *Pyrrherodia purpurea*, 15.
Belly and thighs pale grey *Ardea melancephala*, 13.
6. {
Wing over 9.5 ins. 7
Wing under 9.5 ins. 11
Entire plumage slaty-black, or with
throat a reddish wine-colour *Melanophoyx ardesiaca*, 18.
7. {
Plumage slaty-black or grey, but with
chin and upper-throat white *Demigretta schistacea*, 20.
Plumage not entirely slaty-black or
grey 8
8. {
Wing distinctly cross-barred *Botaurus stellaris*, 28.
Wing entirely grey or grey-brown ... 9
Wing earthy-brown with whitish or
brownish-white spots 10
9. {
Neck greyish *Nycticorax nycticorax*, 24.
Neck reddish-brown *Nycticorax leuconotus*, 25.

†—After Reichenow, Die Vögel Afrikas.

10. { Top of head entirely black *Nycticorax leuconotus*, juv., 25.
 { Top of head dark brown with clear
 golden-brown streaks *Nycticorax nycticorax*, juv., 24.
11. { Flight-feathers white *Ardeola ralloides*, 22.
 { Flight-feathers greyish-black, or
 blackish-brown 12
12. { Upper parts entirely slate-coloured,
 or with rust-coloured edgings to
 feathers *Ardeirallus sturmii*, 27.
 { Upper parts not entirely slate colour 13
13. { Wing-coverts glossy steel-grey, with
 rusty-yellowish edgings to feathers *Butorides striatus*, 23.
 { Wing-coverts ochreous-gold or golden-
 brown (in young birds with dark
 brown shaft-streaks) *Ixobrychus minutus*, 26.
14. { Bill under 2.5 ins. long *Bubulcus ibis*, 21.
 { Bill over 2.5 ins. 15
15. { Feet and toes black 16
 { Feet black, toes yellow 17
16. { Bill over 3.3 ins. *Casmerodius albus*, 16.
 { Bill under 3.3 ins. *Mesophoyx intermedius*, 17.
17. { Bill black *Egretta garzetta*, 19.
 { Bill Yellow *Demigretta schistacea* (white phase),
 20

12. GREY HERON.

Ardea cinerea cinerea Linn.

Winter visitor (? resident)—coast and rivers—fairly common.

13. BLACK-HEADED HERON.

Ardea melanocephala Vig. and Childr.

Resident—rivers—common.

MOUNTED.

S.G.M. 1571, ♂, Yei (Mon.), Dec., 1915, C.C. (R.C.).

SKINS.

*S.G.M. 2122, ♂, 2143, ♀, Malek (Mon.), Mar. and Apr., 1923, A.S.
 S.G.M. 2216, ♀, Wad Medani (B.N.), Aug., 1923, H.W.B.
 S.G.M. 2906, ♀ O.E., Wad Medani (B.N.), June, 1924, W.W.B.
 S.G.M. 2895, ♀j, Shendi (Ber.), Aug., 1924, W.W.B.

14. GOLIATH HERON.

Ardea goliath Cretzsch.

Resident—coast and rivers—fairly common.

15. PURPLE HERON.

Pyrrherodia purpurea purpurea Linn.

Winter visitor (? resident)—rivers—fairly common.

SKINS.

*S.G.M. 814, ♀, Abu Fatma (Don.), Oct., 1922, H.H.K.
 S.G.M. 812, ♂, 813, ♀, Letti (Don.), Dec., 1922, H.H.K.
 S.G.M. 3199, ♂, Shakabo (U.N.), Nov., 1925, J.W.C.

16. AFRICAN GREAT WHITE EGRET.

Casmerodius albus melanorhynchus (Wagl.)

Resident—rivers (extreme south)—not common.

SKINS.

*S.G.M. 1679, ♀, Moruto (Mon.), Jan., 1918, J.H.R.Y.

*S.G.M. 2136, ♀, Malek (Mon.), Apr., 1923, A.S.

17. AFRICAN YELLOW-BILLED EGRET.

Mesophoyx intermedium brachyrhynchus (Brehm.)

Resident—rivers (south, occasionally north)—common.

SKINS.

*S.G.M. 2123, ♀, Malek (Mon.), Mar., 1923, A.S.

†*S.G.M. 2896, ♂, Erkowit (R.S.), Sep., 1924, W.W.B.

18. BLACK HERON.

Melanophoyx ardesiaca (Wagl.)

Resident—rivers (extreme south)—not common.

19. LITTLE EGRET.

Egretta garzetta garzetta (Linn.)

Winter visitor (? resident)—rivers—fairly common.

MOUNTED.

S.G.M. 1595, ♀, Khartoum, Sep., 1921, R.C. (R.C.)

SKINS.

*S.G.M. 2134, ♂, Malek (Mon.), Mar., 1923, A.S.

20. RED SEA REEF-HERON.

Demigretta schistacea (Ehr.)

Resident—coast—very common.

SKINS.

S.G.M. 904, ♀, Suakin (R.S.), May, 1923, W.W.B.

S.G.M. 905, ♀, Trinkitat (R.S.), May-June, 1923, W.W.B.

§S.G.M. 906, ♂, 907, ♂, Suakin (R.S.), June, 1923, W.W.B.

‡S.G.M. 908, ♂, Suakin (R.S.), June, 1923, W.W.B.

S.G.M. 2907, ♂, 2908, ♂, Suakin (R.S.), Oct., 1924, W.W.B.

21. BUFF-BACKED HERON, or CATTLE EGRET.

Bubulcus ibis (Linn.)

Resident—rivers (south, migrating north in summer to breed)—abundant.

MOUNTED.

1216, ♀, 1217, ♀, Khartoum, May, 1913, A.L.B. (A.L.B.).

SKINS.

S.G.M. 2909, ♀ br., 2910, ♀ br., 2911, ♀ br., Wad Medani (B.N.), May, 1924, W.W.B.

S.G.M. 2219, ♀, 2434, ♀, Wad Medani (B.N.), Aug., 1923, H.W.B.

S.G.M. 144, ♀, 145, ♀, Khartoum, Sep., 1921, R.C.

§—In breeding plumage. †—White phase.

†—A juvenile bird of uncertain subspecific status.

22. SQUACCO HERON.

Ardeola ralloides ralloides (Scop.)

Resident—rivers—common.

MOUNTED.

S.G.M. 1214, ♀, Khartoum, Oct., 1913, A.L.B. (A.L.B.).

S.G.M. 1602, ♂, Khartoum, Sep., 1921, R.C. (R.C.).

SKINS.

*S.G.M. 141, ♀, 142, ♂, Khartoum, Sep., 1921, R.C.

S.G.M. 819, ♂, Korti (Don.), Oct., 1922, H.H.K.

S.G.M. 2912, ♂, Sinkat (R.S.), Sep., 1922, W.W.B.

23a. AFRICAN GREEN-BACKED HERON.

Butorides striatus atricapillus (Afz.)

Resident—rivers (south, migrating north in summer to breed)
not common.

MOUNTED.

S.G.M. 1229, ♂, Khartoum, July, 1913, A.L.B. (A.L.B.).

S.G.M. 1530, ♀, Ikoto (Mon.), Feb., 1918, J. H. R. Y. (R.C.).

SKINS.

*S.G.M. 140, ♀, Rahad (Kor.), Aug., 1921; J.E.M.M.

23b. RED SEA GREEN-BACKED HERON.

Butorides striatus brevipes (Ehr.)

Resident—coast—not common.

SKINS.

*S.G.M. 909, ♂, Suakin (R.S.), June, 1923, W.W.B.

S.G.M. 2913, ♀, Suakin (R.S.), Oct., 1924, W.W.B.

24. NIGHT HERON.

Nycticorax nycticorax nycticorax (Linn.)

Resident—rivers—fairly common.

MOUNTED.

S.G.M. 1570, ♀, Kaka (U.N.), June, 1920, W.M.H.P. (R.C.).

SKINS.

*S.G.M. 815, ♀, Abu Fatma (Don.), Nov., 1922, H.H.K.

*S.G.M. 817, ♀, 816, ♂, Letti (Don.), Nov., 1922, H.H.K.

*S.G.M. 2362, ♂, 2364, ♀, Wad Medani (B.N.), Nov., 1923, W.W.B.

25. WHITE-BACKED NIGHT HERON.

Nycticorax leuconotus (Wagl.)

Resident—rivers (south)—not common.

26a. LITTLE BITTERN.

Ixobrychus minutus minutus (Linn.)

Winter visitor—rivers—fairly common.

MOUNTED.

S.G.M. 1230, ♀, 1231, ♂, Khartoum, Sep. and Oct., 1913, A.L.B. (A.L.B.).

†S.G.M. 1618, ♂, Khartoum, May, 1922, H.W.B. (R.C.).

SKINS.

S.G.M. 2897, ♂, Erkowit (R.S.), Sep., 1924, W.W.B.

*S.G.M. 821, ♀, Abu Fatma (Don.), Oct., 1922, H.H.K.

26b. RED-NECKED LITTLE BITTERN.

Ixobrychus minutus payesii (Hartl.)

Resident—rivers (south)—fairly common.

27. AFRICAN DWARF BITTERN.

Ardeirallus strurmii (Wagl.)

Resident—rivers (south)—not common.

28. EUROPEAN BITTERN.

Botaurus stellaris stellaris (Linn.)

Winter visitor—rivers—occasional.

MOUNTED.

S.G.M. 125, ♂, Khartoum, Nov., 1913, A.L.B. (A.L.B.).

S.G.M. 126, ♀, Khartoum, Dec., 1913, Col. E. B. Williamson (A.L.B.).

SKINS.

S.G.M. 138, ♀, Bergeig (Don.), Nov., 1920, H.H.K.

S.G.M. 820, ♂, Letti (Don.), Dec., 1922, H.H.K.

Family *SCOPIDÆ*.

29. GREATER HAMMERHEAD.

Scopus umbretta bannermani C. Grant.

Resident—rivers (south)—common.

MOUNTED.

S.G.M. 1367, ♀, Fashoda (U.N.), Feb., 1915, A.L.B. (A.L.B.).

SKINS.

* S.G.M. 2135, ♂, Malek (Mon.), Mar., 1923, A.S.

Family *BALÆNICIPITIDÆ*.

30. SHOEBILL STORK.

Balaeniceps rex Gould.

Resident—sudd—fairly common.

MOUNTED.

S.G.M. 1617, ♂, ex. Khartoum Zoo, May, 1921, H.C.B. (R.C.).

†—Subspecies incert.—There is no material in the Museum for comparison.

Sub-Order CICONIÆ.

Family CICONIIDÆ.

KEY TO SPECIES.

1. { Head and neck white, or with only a small amount of black on forehead ... 2
Head and neck entirely black ... 4
Head and neck bare; skin of a dirty flesh colour *Leptoptilos crumeniferus*, 37.
2. { Head feathered right to base of bill ... 3
Front of head bare, leaving a space between the base of the bill and the feathering of the hind-head ... *Ibis ibis*, 38.
3. { Feathers of neck of a woolly or downy nature; tail black, strongly forked *Dissoura episcopus*, 33.
Feathers of neck not woolly or downy; tail white, not forked *Ciconia ciconia*, 31.
4. { Bill, when closed, with a distinct gap between upper and lower mandibles *Anastomus lamelligerus*, 35.
Bill, when closed, with no space between mandibles 5
5. { Size very large, wing over 25 ins.; a flat frontal plate (or "saddle") on base of bill *Ephippiorhynchus senegalensis*, 36.
Size medium, wing under 25 ins.; no "saddle" on base of bill 6
6. { Size medium, wing over 20 ins.; back and rump black *Ciconia nigra*, 32.
Size smaller, wing under 20 ins.; back and rump white (seen only in flight) *Sphenorhynchus abdimii*, 34.

31. WHITE STORK.

Ciconia ciconia ciconia (Linn.)

Spring and autumn passage migrant—abundant.

32. BLACK STORK.

Ciconia nigra (Linn.)

Winter visitor—savana and arid (acacia-forest)—not common.

SKINS.

S.G.M. 779, ♀, 780, ♂, Bergeig (Don.), Oct., 1922, H.H.K.

33. AFRICAN WOOLLY-NECKED STORK.

Dissoura episcopus microscelis (Gray.)

Resident—rivers (south)—not common.

34. ABDIM'S STORK.

Sphenorynchus abdimii (Licht.)

Resident—savana, migrating north in summer to breed—abundant.

MOUNTED.

S.G.M. 124, ♂, Khartoum, July, 1913, A.L.B. (A.L.B.).

SKINS.

S.G.M. 2914, ♂, 2915, ♂ br., 2916, ♀ br., 2917, ♀ br., 3018, ♂ br., Wad Medani (B.N.), May and June, 1924, W.W.B.

S.G.M. 2440, ♂, Wad Medani (B.N.), Aug., 1923, H.W.B.

35. AFRICAN OPEN-BILL.

Anastomus lamelligerus lamelligerus Temm.

Resident—rivers (south, occasionally north)—fairly common.

MOUNTED.

S.G.M. 123, ♂, Khartoum, Feb., 1923, A.L.B. (A.L.B.).

36. SADDLE-BILL or AFRICAN JABIRU.

Ephippiorhynchus senegalensis (Shaw).

Resident—rivers (south)—fairly common.

37. MARABOUT.

Leptoptilos crumeniferus (Less.)

Resident—throughout—common.

SKINS.

S.G.M. 3280, ♂?, ex Khartoum Zoo, June, 1926, H.C.B.

38. WOOD-IBIS.

Ibis ibis (Linn.)

Resident—rivers (south, north in summer)—common.

Family PLEGADIDÆ.

KEY TO SPECIES.

1. { Bill long and downwardly curved ... 2
Bill flattened, spatulate at tip ... 5
2. { Plumage mostly white, neck black, bare in adult, feathered in young ... *Threskiornis aethiopicus*, 39.
Plumage black or grey, more or less glossy 3
3. { Whole of head and fore-neck naked ... *Ciconia eremita*, 40.
Only a small portion of front of head naked 4

4. { Size large, wing over 13.0 ins. *Hagedashia hagedash*, 41.
 { Size smaller, wing under 12.0 ins. *Plegadis falcinellus*, 42.
5. { Bill reddish brown *Platalea alba*, 44.
 { Bill greyish, barred with black and
 tipped with orange *Platalea leucorodia*, 43.

39. SACRED IBIS.

Threskiornis aethiopicus aethiopicus (Lath.)

Resident—rivers—fairly common.

MOUNTED.

S.G.M. 1563, ♂, Khartoum, Oct., 1920, R.C. (R.C.).

SKINS.

S.G.M. 2215, ♂, 2441, ♀, Wad Medani (B.N.), Oct. and Nov., 1924, H.W.B.
 S.G.M. 2918, ♂, Wad Medani (B.N.), June, 1924, W.W.B.

40. HERMIT or BALD-HEADED IBIS.

Comatibis eremita (Linn.)

Resident—coast, occasionally inland to rivers—common.

SKINS.

S.G.M. 3231, ♂, Khor Hanroyet, P. Sudan (R.S.), Mar., 1926, W.R.

41. NILE VALLEY HAGEDASH IBIS.

Hagedashia hagedash nilotica Neum.

Resident—rivers (south)—very common.

SKINS.

*S.G.M. 2138, ♂, 2139, ♂, ?, Malek (Mon.), Mar., 1923, A.S.

S.G.M. 3200, ♀, Kaka (U.N.), Nov., 1925, J.W.C.

42. GLOSSY IBIS.

Plegadis falcinellus falcinellus (Linn.)

Resident (?)—rivers—fairly common.

MOUNTED.

S.G.M. 1566, ♀, Renk (U.N.), Aug., 1920, W.M.H.P. (R.C.).

SKINS.

*S.G.M. 2182, ♂, ?, Shekela (Kor), Jan., 1923, R.G.A.

43. EUROPEAN SPOONBILL.

Platalea leucorodia leucorodia Linn.

Resident—coast and rivers (north)—fairly common.

SKINS.

S.G.M. 903, ♀br., Suakin (R.S.), June, 1923, W.W.B.

44. AFRICAN SPOONBILL.

Platalea alba Scop.

Resident—rivers—fairly common.

SKINS.

S.G.M. 136, ♀, Kerma (Don.), Nov., 1920, H.H.K.

S.G.M. 2137, ♀, Malek (Mon.), Mar., 1923, A.S.

Sub-Order PHœNICOPTERI.

Family PHœNICOPTERIDÆ.

KEY TO SPECIES. †

- | | |
|---|----------------------------------|
| Larger, wing about 18 ins. in adult ;
upper mandible slightly convex and
shutting down <i>on the top</i> of the
edges of the lower one | <i>Phœnicopterus ruber</i> , 45. |
| Smaller, wing about 14 ins. in adult ;
upper mandible flattened and shut-
ting down <i>between</i> the rami of the
lower one | <i>Phœniconaias minor</i> , 46. |

45. GREATER FLAMINGO.

Phœnicopterus ruber antiquorum Temm.

Resident—coast (occasionally rivers)—fairly common.

SKINS.

S.G.M. 2896, ♂, Suakin (R.S.), Oct., 1924, W.W.B.

46. LESSER FLAMINGO.

Phœniconaias minor (Geoff.)

Resident—coast and rivers (south)—not common.

Order - - ANSERIFORMES.

Sub-Order ANSERES.

Family ANATIDÆ.

KEY TO SPECIES.

1. { Size large, wing over 12 ins. 2
 Size smaller, wing under 12 ins. ... 4
2. { Face bare ; sides of head and throat
 white, hind-head glossy black ; a
 sharp spur on bend of wing ... *Plectropterus gambensis*, 66.
 Face feathered to base of bill ... 3

†—After Stark and Sclater, Birds of South Africa.

	Head greyish brown, except for a white band on forehead ...	<i>Anser albifrons</i> , 65.
3.	Head white, spotted with black; a comb-like knob on base of bill in male ...	<i>Sarkidiornis melanotus</i> , 63.
	Head white, tinged with rufous ...	<i>Casarca ferruginea</i> , 67.
	Front of head dirty white, a chestnut patch on each side and surrounding eye ...	<i>Alpochen aegyptiacus</i> , 64.
4.	Bill broadened and spatulate towards the tip ...	<i>Spatula clypeata</i> , 51.
	Bill of approximately the same width throughout ...	5
5.	A speculum‡ with metallic lustre on wing ...	6
	Speculum, if present, without metallic lustre ...	10
6.	Speculum metallic green or bronze-green ...	7
	Speculum metallic purple ...	<i>Anas platyrhynchos</i> , 52.
7.	Outer-web of innermost feather of speculum white ...	<i>Anas penelope</i> , 54.
	Outer-web of innermost feather of speculum not white ...	8
8.	Speculum bordered in front by a narrow band of chestnut, behind by one of black and white ...	<i>Dafila acuta</i> , 58.
	Speculum bordered in front by a broad band of white, behind by a narrower one, also white ...	9
9.	Outer-half of speculum black; white washed with chestnut on front of speculum ...	<i>Anas crecca</i> , 55.
	Outer-half of speculum not black; no chestnut tinge on white in front ...	<i>Anas querquedula</i> , 57.
10.	Speculum salmon pink ...	<i>Anas erythrорhynchas</i> , 56.
	Speculum rufous brown, between two narrow white bars ...	<i>Dafila acuta</i> , ♀, 58.
	Speculum white and black ...	11
	No distinct speculum, but with a small amount of white on that region of wing ...	16
	No speculum, or with only a slight greyish tinge ...	18
11.	Speculum bordered in front and behind with black or brown ...	12
	Speculum bordered in front <i>only</i> with black ...	15
12.	Under parts mostly white ...	13
	Under parts brown or greyish brown ...	<i>Nyroca erythrophthalma</i> , 49.

‡—*Speculum* is defined in Newton's "Dictionary of Birds" as "any patch of feathers on the wing of a bird differing remarkably in colour from those that are near them, and especially applied to the lustrous patch formed by the cubital remiges (secondaries) in the freshwater-Ducks." In the above key, no account is taken of coloured patches (such as is found in the Gadwall) in the region of the "shoulder," or bend of wing.

13. { Head black *Nyroca fuligula*, ♂, 50.
 { Head rufous-brown *Nyroca nyroca*, 47.
 { Head brown 14
14. { Head crested *Nyroca fuligula*, ♀, and juv. ♂, 50.
 { Head not crested *Nyroca nyroca*, ♀, and juv. ♂, 47.
15. { Size medium, wing over 7 ins. ... *Anas strepera*, 53.
 { Size smaller, wing under 7 ins. ... *Nettapus auritus*, 62.
16. { Outer web of one secondary, as well as
 { two narrow bars on wing, white ... *Anas penelope*, ♀, 54.
 { Two narrow white bars only on wing... 17
17. { Size larger, wing over 8.5 ins. ... *Dafila acuta*, ♀, 58.
 { Size smaller, wing under 8.5 ins. ... *Anas querquedula*, 57.
18. { Head rich, deep chestnut *Nyroca ferina*, ♂, 48.
 { Head black, often with a white patch
 { on forehead *Pteronetta hartlaubi*, 59.
 { Head brown 19
 { Head mostly white *Dendrocygna viduata*, 60.
19. { Tail-coverts whitish *Dendrocygna fulva*, 61.
 { Tail-coverts dark brown *Nyroca ferina*, ♀, and juv., 48.

47. WHITE-EYED POCHARD.

Nyroca nyroca nyroca (Güld.)

Winter visitor—rivers (north)—not common.

MOUNTED.

S.G.M. 1588, ♀, Bergeig (Don.), Nov., 1920, H.H.K. (R.C.)

SKINS.

*S.G.M. 834, ♂, 832, ♀, Letti (Don.), Nov., 1922, H.H.K.

48. POCHARD.

Nyroca ferina ferina (Linn.)

Winter visitor—rivers (north)—not common.

MOUNTED.

S.G.M. 2454, ♂, Khartoum, Mar., 1924, B.W.W. (R.C.)

SKINS.

S.G.M. 156, ♀, Sahaba (Don.), Nov., 1921, H.H.K.

49. SOUTH AFRICAN POCHARD.

Nyroca erythrophthalma (Wied.)

Resident—rivers (south)—not common.

50. TUFTED DUCK.

Nyroca fuligula (Linn.)

Winter visitor—rivers (north)—not common.

MOUNTED.

S.G.M. 1599, ♂, Dongola, Dec., 1921, H.H.K. (R.C.)

S.G.M. 1600, ♀, Letti (Don.), Dee., 1921, H.H.K. (R.C.)

SKINS.

S.G.M. 157, ♂, Letti (Don.), Nov., 1921, H.H.K.

51. SHOVELER.

Spatula clypeata (Linn.)

Winter visitor—rivers—fairly common.

MOUNTED.

S.G.M. 1590, ♂, 1591, ♀, Zeidab (Ber.), Mar., 1921, H. W. B. (R.C.)

SKINS.

S.G.M. 150, ♂, Zeidab (Ber.), Mar., 1921, H.W.B.

S.G.M. 153, ♂, 154, ♀, Letti basin (Don.), Nov. and Dec., 1921. H.H.K.

52. MALLARD.

Anas platyrhynchos Linn.

Winter visitor—rivers (north)—not common.

53. GADWALL.

Anas strepera Linn.

Winter visitor—rivers (north)—not common.

SKINS.

*S.G.M. 833, ♂, 836, ♀, 837, ♀, Letti (Don.), Nov. and Dec., 1922, H.H.K.

54. WIGEON.

Anas penelope Linn.

Winter visitor—rivers (north)—not common.

SKINS.

*S.G.M. 830, ♂, 831, ♀, Letti (Don.), Nov., 1922, H.H.K.

*S.G.M. 835, ♀, Letti (Don.), Dec., 1920, H.H.K.

55. COMMON TEAL.

Anas crecca Linn.

Winter visitor—rivers—common.

MOUNTED.

S.G.M. 1559, ♂, Zeidab (Ber.), Dec., 1919, H.W.B. (R.C.)

S.G.M. 1612, ♂, Khartoum, Nov., 1922, R.C. (R.C.)

SKINS.

*S.G.M. 159, ♂, 160, ♂, 162, ♂, Letti Basin (Don.), Nov. and Dec., 1921, H.H.K.

*S.G.M. 163, ♂, Genetti (Don.), Nov., 1921, H.H.K.

*S.G.M. 2167, ♂?, Shekela (Kor.), Jan., 1923, R.G.A.

56. RED-BILL.

Anas erythrорhyncha (Gmel.)

Resident—rivers (south)—not common.

57. GARGANEY.

Anas querquedula Linn.

Winter visitor—rivers—common.

MOUNTED.

S.G.M. 1288, ♂, Khartoum, May, 1914, A.L.B. (A.L.B.).

S.G.M. 1596, ♀, Khartoum, Dec., 1921, R.C. (R.C.)

SKINS.

*S.G.M. 158, ♂, Tanganassi Is. (Don.), Nov., 1921, H.H.K.

*S.G.M. 2235, ♂, 2439, ♂, Wad Medani (B.N.), Sep. and Oct., 1923, H.W.B.

58. PINTAIL.

Dafila acuta (Linn.)

Winter visitor—rivers—abundant.

MOUNTED.

S.G.M. 1212, ♂, 1213, ♀, Khartoum, Feb. and Oct., 1913, A.L.B. (A.L.B.).

S.G.M. 1613, ♂, Hassanarti (Don.), Nov., 1921, H.H.K. (R.C.)

SKINS.

*S.G.M. 151, ♀, Debba (Don.), Nov., 1921, H.H.K.

*S.G.M. 152, ♂, Amentago (Don.), Nov., 1921, H.H.K.

*S.G.M. 159, ♂, Khandak (Don.), Nov., 1921, H.H.K.

*S.G.M. 829, ♀, Bergeig (Don.), Oct., 1922, H.H.K.

*S.G.M. 2234, ♂, Wad Medani (B.N.), Oct., 1923, H.W.B.

59. HARTLAUB'S DUCK.

Pteronetta hartlaubii (Cassin.)

Resident—Savana IV (rivers with wooded banks)—fairly common.

SKINS.

S.G.M. 2368, ♂?, Congo Divide (B.G.), 1922, A.S.

S.G.M. 3025, ♀, Yambio (B.G.), Jan., 1925, P.M.L.

60. WHITE-FACED TREE-DUCK.

Dendrocygna viduata (Linn.)

Resident—rivers—common.

MOUNTED.

S.G.M. 1568, ♂, Renk (U.N.), 1920, W.M.H.P. (R.C.)

SKINS.

S.G.M. 169, ♂, Renk (U.N.), 1920, W.H.M.P.

S.G.M. 166, ♂, 167, ♀, 168, ♀, Rahad (Kor.), Aug., 1921, J.E.M.M.

S.G.M. 164, ♂?, Khartoum, May, 1922, B.W.W.

61. FULVOUS TREE-DUCK.

Dendrocygna fulva (Gmel.)

Resident—rivers—not common.

MOUNTED.

S.G.M. 1567, ♀, Renk (U.N.), July, 1920, W.H.M.P. (R.C.)

62. DWARF GOOSE.

Nettapus auritus (Bodd.)

Resident—rivers (south)—fairly common.

MOUNTED.

S.G.M. 1560, ♂, 1561, ♀, Meridi (B.G.), Feb., 1916, C.C. (R.C.).

63. COMB-BILLED GOOSE.

Sarkidiornis melanotus (Pennant).

Resident—rivers (south)—common.

MOUNTED.

S.G.M. 1569, ♂, Renk (U.N.), 1920, W.H.M.P. (R.C.)

SKINS.

S.G.M. 149, ♀, El Obeid (Kor.), Aug., 1921, R.S.G.

S.G.M. 148, ♂, Renk (U.N.), 1920, W.H.M.P.

64. EGYPTIAN GOOSE.

Alopochen aegyptiacus (Linn.)

Resident—rivers—abundant.

MOUNTED.

S.G.M. 1565, ♂, Zeidab (Ber.), Dec., 1919, H.W.B. (R.C.).

65. WHITE-FRONTED GOOSE.

Anser albifrons (Scop.)

Occasional winter visitor—rivers (extreme north)—rare.

MOUNTED.

S.G.M. 1589, ♀, Morghani Is. (Don.), Dec., 1920, H.H.K. (R.C.)

66. SPUR-WINGED GOOSE.

Plectropterus gambensis (gambensis) (Linn.)

Resident—rivers (south)—common.

SKINS.

S.G.M. 3230, Khartoum, Mar., 1926, B.W.W.

67. RUDDY SHELD-DUCK.

Casarca ferruginea (Pallas).

Winter visitor—rivers (north)—common.

MOUNTED.

S.G.M. 1603, ♂, Letti Basin (Don.), Dec., 1921, H.H.K. (R.C.).

Order - - FALCONIFORMES.

Sub-Order ACCIPITRES.

Family SAGITTARIIDÆ.

68. THE SECRETARY-BIRD.

Sagittarius serpentarius Miller.

Resident—savana and arid (acacia-grass)—not common.

MOUNTED.

S.G.M. 3019, ♀j, ex Khartoum Zoo, Feb., 1926, H.C.B. (R.C.)

Family AEGYPIIDÆ.

KEY TO SPECIES.†

1. {
 Nostrils round *Aegypius monachus*, 69.
 Nostrils long and perpendicular ... 2
 Nostrils long and horizontal ... 6
2. {
 Tarsus shorter than middle-toe ... 3
 Tarsus as long as, or longer than,
 middle-toe 5
3. {
 Fourteen tail-feathers... 4
 Twelve tail-feathers *Pseudogyps africanus*, 72.
4. {
 Under wing-coverts dark brown with
 white or tawny-white edges ... *Gyps rüppellii*, 71.
 Under wing-coverts rust colour or
 pale rusty gold *Gyps fulvus*, 70.
5. {
 Whole head naked *Torgos tracheliotus*, 73.
 Top of head with a thick downy
 covering *Trigonoceps occipitalis*, 74.
6. {
 Fourteen tail-feathers; plumage white
 in adult *Neophron percnopterus*, 75.
 Twelve tail-feathers; plumage brown *Necrosyrtes monachus*, 76.

69. BLACK VULTURE.

Aegypius monachus (Linn.)

Occurrence doubtful—recorded from Berber Provincee.

70a. GRIFFON VULTURE.

Gyps fulvus fulvus (Habl.)

Occurrence doubtful—north.

70b. INDIAN GRIFFON VULTURE.

Gyps fulvus fulvescens Hume.

Resident—Red Sea coastal-plain—fairly common.

†—After Reichenow, Die Vögel Afrikas.

71. RÜPPELL'S GRIFFON.

Gyps rüppellii rüppellii (Brehm.)

Resident—throughout—fairly common.

72. AFRICAN WHITE-NECKED VULTURE.

Pseudogyps africanus (Salvad.)

Resident—throughout—very common.

73. LAPPET-FACED VULTURE.

Torgos tracheliotus nubicus Smith.

Resident—throughout—fairly common.

74. WHITE-HEADED VULTURE.

Trigonoceps occipitalis (Burch.)

Resident—throughout—common.

75. EGYPTIAN VULTURE.

Neophron percnopterus percnopterus (Linn.)

Resident—throughout—abundant.

76. HOODED VULTURE.

Necrosyrtes monachus pileatus (Burch.)

Resident—throughout—common.

Family FALCONIDÆ.

KEY TO SPECIES.†

1. { Edge of upper mandible with a distinct tooth behind the hook 2
Edge of upper mandible straight or slightly sinuated, not toothed ... 23
2. { Nostrils rounded ; with a central bony tubercle 3
Nostrils oval ; without bony tubercle *Polihierax semitorquatus*, 90.
3. { Tarsus distinctly shorter than middle toe with claw 4
Tarsus equal to, or longer than, middle toe with claw 16
4. { Top of head same colour or differing but slightly from rest of upper parts ... 5
Top of head markedly different in colour to upper parts 12

†—Partly after Reichenow, Die Vögel Afrikas.

5. { Abdomen distinctly barred ... *Falco peregrinus*, 77a.
 { Abdomen with or without streaks
 but not barred 6
6. { Under parts grey *Falco concolor* 81.
 { Under parts not grey 7
7. { Tail tipped with white or buff ... 8
 { Tail tipped with rufous brown ... 9
8. { Small; wing under 9.5 ins. *Falco columbarius*, 82.
 { Larger; wing over 9.5 ins. *Falco peregrinus*, 77.
9. { Thighs orange-rufous 10
 { Thighs white, streaked with brown ... 11
10. { Under parts white with broad brown streaks *Falco subbuteo*, 79.
 { Under parts orange rufous (like the thighs) with narrow brown streaks *Falco cuvieri*, 80.
11. { Ear-coverts black *Falco subbuteo*, juv., 79.
 { Ear-coverts tawny, narrowly streaked with black *Falco cuvieri*, juv., 80.
12. { Small, wing under 9 ins.; belly barred in adult *Falco chiquera*, 85.
 { Larger, wing over 9 ins.; belly not barred 13
13. { Larger, wing over 12.3 ins. 14
 { Smaller, wing under 12.3 ins. *Falco peregrinus*, 77c.
14. { Top of head brown, marked or streaked with pale rufous white *Falco peregrinus*, juv. 77.
 { Top of head vinous buff, or white, with a rufous buff tinge, with, or without, narrow blackish streaks ... 15
15. { Dark bars on primaries extending right to inner margins *Falco biarmicus*, 78.
 { Dark bars on primaries incomplete and irregular—not reaching to inner margins *Falco cherrug*, 84.
16. { Ground colour of upper parts grey ... 17
 { Ground colour of upper parts rufous brown 19
17. { Under parts grey 18
 { Under parts rusty red *Falco vespertinus*, ♀ and juv., 83.
18. { Thighs and under tail-coverts rusty red *Falco vespertinus*, ♂, 83.
 { Thighs and under tail-coverts grey ... *Falco ardosiacaeus*, 89.
19. { Upper parts with black spots or cross-bars 20
 { Upper parts with black longitudinal streaks *Falco alopex*, 87.
 { Upper parts without black markings ... *Falco naumanni*, ♂, 88.
20. { Top of head grey with blackish streaks *Falco tinnunculus*, ♂, 86.
 { Top of head rufous brown with blackish streaks or bars 21
21. { Nape with some white feathers *Falco vespertinus*, ♀, 83.
 { Nape without white 22

22. { Wing over 9.8 ins. *Falco tinnunculus*, ♀, and juv., 86.
 { Wing under 9.8 ins. *Falco naumannii*, ♀, and juv., 88.
23. { Nostrils concealed by bristles, a tuft
 of bristles on chin *Gypaëtus barbatus*, 114.
 { Nostrils not concealed by bristles, nor
 with bristles on chin 24
24. { Tarsus feathered to bases of toes ... 25
 { Tarsus not feathered to bases of toes 33
25. { Top of head with long crest *Lophaëtus occipitalis*, 104.
 { Top of head not (or only very slightly)
 crested 26
26. { Size large, wing over 20 ins. 27
 { Size small, wing under 20 ins. 30
27. { Tail distinctly barred 28
 { Tail not barred (or only faintly so) ... 29
28. { Under parts mostly, or entirely, white *Polemaëtus bellicosus*, 103.
 { Under parts chocolate brown ... *Aquila heliaca*, 96.
29. { General plumage dark brown ... *Aquila nipalensis*, 97.
 { General plumage tawny-brown ... *Aquila rapax*, 98.
30. { Tail distinctly barred *Hieraëtus spilogaster*, 101.
 { Tail not barred (or only faintly so) ... 31
31. { Size larger; wing over 18 ins. ... *Aquila pomarina*, 99.
 { Size smaller, wing under 18 ins. ... 32
32. { Tail under 9.2 ins.; under parts with
 distinct longitudinal stripes ... *Hieraëtus pennatus*, 102.
 { Tail over 9.2 ins.; under parts not
 striped *Aquila wahlbergi*, 100.
33. { Lores and region round eyes naked ... 34
 { Lores and region round eyes clothed
 with scale-like feathers *Pernis apivorus*, 94.
 { Lores and region round eyes clothed
 with bristles or feathers (never
 scale-like) 35
34. { Tail long; about 13 ins. *Gymnogens typicus*, 129.
 { Tail medium; about 8 ins. *Cucumia vocifer*, 113.
 { Tail short; about 4 ins. *Terathopius ecaudatus*, 112.
35. { Tail forked; outermost feathers the
 longest 36
 { Tail square, graded, or rounded;
 outermost feathers equal to, or
 shorter (never longer) than, the rest 37
36. { Tail deeply forked; wing under 12 ins. *Chelictinia riocourii*, 91.
 { Tail only slightly forked; wing over
 12 ins. *Milvus migrans*, 92.
37. { Tarsus covered in front by transverse
 scutæ 38
 { Tarsus covered in front by hexagonal
 plates 54
38. { Tail about half the length of wing or
 shorter 39
 { Tail more than three-fifths the length
 of wing 42

39. { Bill, from the cere to the tip 20-23
mms. (under 0.9 ins.) ... 40
Bill, from the cere to the tip 25 mms.
or over (1.0 ins. or over) ... 41
40. { Thighs and under tail-coverts entirely
white or golden brownish white ... *Buteo auguralis*, 118.
Thighs and under tail-coverts rust-
colour, or white densely spotted or
banded with rust-colour, or dark
brown *Buteo buteo*, 115.
41. { Head and neck pale isabelline, or
golden brownish-white with black-
ish brown shaft-streaks ... *Buteo ferox*, 116.
Top of head and hind neck slaty black *Buteo rufofuscus*, 117.
42. { Middle toe very long; inner toe not
reaching as far as base of claw of
middle toe 43
Inner toe reaching to the base of the
middle toe 45
43. { Nostrils round; with a bony tubercle
near the upper border *Melierax gabar*, 124.
Nostrils long; without bony tubercle 44
44. { Larger, wing over 7 ins. *Accipiter nisus*, 119.
Smaller, wing under 7 ins. *Accipiter minulus*, 120.
45. { Nostrils round; with a bony tubercle
near upper border 46
Nostrils long; without a bony
tubercle 47
46. { Wing over 10 ins. *Melierax metabates*, 123.
Wing under 10 ins. *Kaupifalco monogrammicus*, 105.
47. { Wing reddish chestnut, contrasting
with colour of rest of plumage ... *Butastur rufipennis*, 111.
Wing not reddish chestnut 48
48. { Wing under 8 ins. *Astur badius*, 122.
Wing over 8 ins. 49
49. { Face with a distinct "ruff," giving
an owl-like appearance 50
Face with no "ruff" *Accipiter melanoleucus*, 121.
50. { Fifth primary plain, not emarginated
on its outer web 50
Fifth primary emarginated on its
outer web like the others 5
51. { Second primary emarginated on its
outer web about an inch beyond the
tips of the primary coverts ... *Circus pygargus*, 126.
Second primary emarginated at the
level of the tips of the primary
coverts *Circus macrourus*, 127.
52. { Upper parts brown 53
Upper parts grey *Circus cyaneus*, ♂, 125.
53. { Tail with cross-barring *Circus cyaneus*, ♀, 125.
Tail without cross-barring *Circus aeruginosus*, 128.

54.	{	Tarsus distinctly longer than middle toe with claw ; size large, wing over 15 ins. ...	155
		Tarsus shorter than middle toe and claw ; size small, wing under 12 ins. <i>Elanus caeruleus</i> , 93.	
55.	{	Tail brownish black with a broad pale brown or whitish bar about its middle and another at its tip ...	<i>Circaetus cinerascens</i> , 110.
		Tail blackish brown with numerous narrow, pale brown or whitish cross-bars ...	<i>Circaetus cinereus</i> , 107.
	{	Tail pale brown or greyish brown with two to four blackish brown cross-bars ; or uniformly banded pale and blackish brown ...	56
56.	{	Crop clear brown, or white barred or spotted with clear brown ; rest of under parts white spotted or banded with greyish or golden brown ...	<i>Circaetus gallicus</i> , 106.
		Crop dusky brown ; rest of under parts pure white ...	<i>Circaetus pectoralis</i> , 108.
		Crop greyish brown with whitish edges to feathers ; breast banded greyish-brown and white ...	<i>Circaetus beaudouini</i> , 109.

77a. EUROPEAN PEREGRINE.

Falco peregrinus peregrinus Tunst.

Wanderer—arid—rare.

77b. EASTERN PEREGRINE.

Falco peregrinus calidus Lath.

Winter visitor—arid—occasional.

MOUNTED.

†S.G.M. 1291, ♀, Kanisa (Fung), Dec., 1913, W.P.L. (Sheals).

†S.G.M. 1360, ♂, Khartoum, Nov., 1914, A.L.B. (A.L.B.).

77c. BARBARY FALCON.

Falco peregrinus pelegrinoides Temm.

Winter visitor (resident ?)—arid—fairly common.

MOUNTED.

S.G.M. 1361, ♂, Khartoum, Dec., 1914, A.L.B. (A.L.B.).

77d. MEDITERRANEAN PEREGRINE.

Falco peregrinus brookei Sharpe.

Wanderer—arid—occasional.

SKINS.

*S.G.M. 890, ♂?, Khartoum, Sept., 1922, W.W.B.

† Subspecies incert., probably this form.

77e. BABYLONIAN FALCON.

Falco peregrinus babylonicus Scl.

Winter visitor—arid—occasional.

77f. AFRICAN PEREGRINE.

Falco peregrinus minor Schleg.

Resident—savana II—not common.

78a. ABYSSINIAN LANNER.

Falco biarmicus abyssinicus Neum.

Resident—savana and Red Sea Hills—fairly common.

MOUNTED.

§S.G.M. 1574, ♀j, Khartoum, Jan., 1920, R.C. (R.C.).

SKINS.

*S.G.M. 2131, ♂?, Malek (Mon.), Mar., 1923, A.S.

†S.G.M. 2844, ♀j, 2845, ♀, 2846, ♂j, 2847, ♂, 2848♂j, 2849♂j, Erkowit (R.S.), Sep., 1924, W.W.B.

78b. SUDAN LANNER.

Falco biarmicus tanypterus Schleg.

Resident—arid—fairly common.

MOUNTED.

‡*S.G.M. 839, ♂?, Kerma (Don.), Oct., 1922, H.H.K. (R.C.).

SKINS.

‡*S.G.M. 838, ♂, Kerma (Don.), Oct., 1922, H.H.K.

‡*S.G.M. 840, ♂, Letti (Don.), Dec., 1922, H.H.K.

79. THE HOBBY.

Falco subbuteo subbuteo Linn.

Spring and autumn passage migrant—fairly common.

80. AFRICAN HOBBY.

Falco cuvieri Smith.

Resident—savana III & IV—fairly common.

SKINS.

*S.G.M. 186, ♂, Mt. Baginzi (B.G.), Mar., 1916, C.C.

81. SOOTY FALCON.

Falco concolor Temm.

Resident—arid—rare.

† Intermediate *abyssinicus tanypterus*.

‡ Intermediate *tanypterus* > *abyssinicus*.

§ Subspecies not determined.

82. MERLIN.

Falco columbarius cesalon Tunst.

Winter visitor—arid—occasional.

SKINS.

*S.G.M. 845, ♂, Letti (Don.), Dec., 1922, H.H.K.

83. WESTERN RED-LEGGED KESTREL.

Falco vespertinus Linn.

Winter visitor—arid—fairly common.

84. SAKER FALCON.

Falco cherrug cherrug Gray.

Winter visitor—throughout—rare.

85. AFRICAN RED-NECKED KESTREL.

Falco chiquera ruficollis Swains.

Resident—savana (frequenting Doleib Palms)—common.

MOUNTED.

S.G.M. 1368, ♀, Taufikia (U.N.), Feb., 1915, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 181, ♂, Wau (B.G.), July-Aug., 1916, C.C.

86a. EUROPEAN KESTREL.

Falco tinnunculus tinnunculus Linn.

Winter visitor—throughout—common.

MOUNTED.

S.G.M. 1012, ♂, Khartoum, Dec., 1912, A.L.B. (A.L.B.).

S.G.M. 1592, ♀, Zeidab (Ber.) Feb., 1921, H.W.B. (R.C.).

SKINS.

*S.G.M. 1697, ♀, Moruto (Mon.), Jan., 1918, J.H.R.Y.

*S.G.M. 194, ♀, 195, ♀, Abu Fatma (Don.), Nov., 1920, H.H.K.

*S.G.M. 201, ♀, Urbi (Don.), Nov., 1920, H.H.K.

*S.G.M. 846, ♀, Letti (Don.), Dec., 1922, H.H.K.

*S.G.M. 193, ♂, Sherifa (Don.), Nov., 1921, H.H.K.

*S.G.M. 200, ♀, Wad Medani (B.N.), Aug., 1922, H.W.B.

*S.G.M. 229, ♂, Wad Medani (B.N.), Oct., 1923, H.W.B.

*S.G.M. 2366, ♀, 2195, ♀, 2442, ♂j, 2443, ♂, Wad Medani (B.N.), Nov. and Dec., 1923, W.W.B.

*S.G.M. 2355, ♀, Hosh (B.N.), Feb., 1923, W.W.B.

*S.G.M. 199, ♀, Khartoum, Oct., 1921, R.C.

86b. AFRICAN MOUNTAIN KESTREL.

Falco tinnunculus carlo (Hart. and Neum.)

Resident—savana (jebels), highland I & II—common.

87. FOX-KESTREL.

Falco alopec alopec (Heugl.)

Resident—savana (jebels), highland I & II—fairly common.

MOUNTED.

S.G.M. 1432, ♂, Kajo Kaji (Mon.), Mar., 1915, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 1698, ♀, Lokoia (Mon.), July, 1918, J.H.R.Y.

*S.G.M. 1699, ♂, Kajo Kaji (Mon.), Mar., 1917, J.H.M.

S.G.M. 3194, ♀, Talodi (N.M.), Dec., 1925, J.W.C.

88. WESTERN LESSER KESTREL.

Falco naumanni naumanni Fleischer.

Spring and autumn passage migrant—fairly common.

MOUNTED.

S.G.M. 1008, ♂, 1016, ♂, 1015, ♀ Shendi (Ber.), May, 1913, A.L.B. (A.L.B.).

89. GREY KESTREL.

Falco ardosiaceus Bonn. and Vieill.

Resident—savana—fairly common.

MOUNTED.

S.G.M. 1265, ♀, Khartoum, Oct., 1911, A.L.B. (A.L.B.).

S.G.M. 1478, ♂, Kajo Kaji (Mon.), Mar., 1915, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 179, ♂, Yei (Mon.), Nov. or Dec., 1916, C.C.

90. ABYSSINIAN PIGMY FALCON.

Polihierax semitorquatus castanotus (Heugl.)

Resident—savana III—rare.

91. AFRICAN SWALLOW-TAILED KITE.

Chelictinia riocourii (Vieill. and Oud.)

Resident—arid (acacia-grass)—common locally.

MOUNTED.

S.G.M. 1013, ♂, 1014, ♂, near El Ein Station (Kor.), Mar., 1914, A.L.B. (A.L.B.).

92a. BLACK KITE.

Milvus migrans migrans (Bodd.)

Wanderer—rare.

92b. EGYPTIAN KITE.

Milvus migrans aegyptius (Gmel.)

Resident—Red Sea Coast (occasionally inland)—common.

SKINS.

*S.G.M. 2851, ♀ 2852, ♂?, Erkowit (R.S.), Sep., 1924, W.W.B.

S.G.M. 2999, ♀, Khartoum, June, 1925, R.C.

†S.G.M. 3004, ♂, Khartoum, June, 1925, R.C.

92c AFRICAN BLACK KITE.

Milvus migrans parasitus (Daud.)

Resident—throughout—abundant.

MOUNTED.

S.G.M. 1011, ♀, Khartoum, Feb., 1913, A.L.B. (A.L.B.).

S.G.M. 3283, ♀, Khartoum, July, 1926, R.C. (R.C.).

SKINS.

*S.G.M. 2249, ♀, 2248, ♂, 2217, ♂, Wad Medani (B.N.), Oct. and Dec., 1923,
H.W.B.

S.G.M. 2998, ♂, 3003, ♂, Khartoum, June, 1925, R. C.

93. BLACK-SHOULDERED KITE.

Elanus caeruleus caeruleus (Desf.)

Resident—savana (occasionally north)—fairly common.

MOUNTED.

S.G.M. 2929, ♂, Mongalla (Mon.), Jan., 1925, H.H.K. (R.C.).

SKINS.

*S.G.M. 180, ♀, Tembura (B.G.), Apr., 1916, C.C.

*S.G.M. 1700, ♀, 1701, ♂, Kajo Kaji (Mon.), Mar. and Apr., 1917, J.H.M.

S.G.M. 2858, ♂, Gendettu (Ber.), Oct., 1924, W.W.B.

94. HONEY-BUZZARD.

Pernis apivorus apivorus (Linn.)

Winter visitor—savana—rare.

95. VERREAUX'S EAGLE.

Aquila verreauxi Less.

Resident—Jebel Marra—fairly common.

96. IMPERIAL EAGLE.

Aquila heliaca Savigny.

Winter visitor—arid—not common.

97. WESTERN STEPPE EAGLE.

Aquila nipalensis orientalis Cab.

Winter visitor (resident ?)—arid—fairly common.

SKINS.

S.G.M. 174, ♂?, Zeidab (Ber.), June, 1921, W.E.G.

† A young bird with very pale reddish head, probably this form.

98. ABYSSINIAN TAWNY EAGLE.

Aquila rapax raptor Brehm.

Resident—throughout—fairly common.

MOUNTED.

S.G.M. 1001, ♀, 1002, ♂, Khartoum, Dec., 1913, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 2453, ♂, Khartoum, Jan., 1924, E.H.M.

*S.G.M. 2538, ♀, Wad Medani (B.N.), Feb., 1924, W.W.B.

99. LESSER SPOTTED EAGLE.

Aquila pomarina Brehm.

Winter visitor—arid—not common.

100. WAHLBERG'S EAGLE.

Aquila wahlbergi Sund.

Resident—savana—not common.

101. AFRICAN HAWK-EAGLE.

Hieraëtus spilogaster (Bp.).

Resident—savana (jebels)—fairly common.

102. BOOTED EAGLE.

Hieraëtus pennatus (Gmel.)

Winter visitor—throughout—not common.

MOUNTED.

S.G.M. 1004, ♀, 1005, ♂, near Singa (Fung), Dec., 1913, A.C. and H.L. (A.L.B.).

103. MARTIAL EAGLE.

Polemaëtus bellicosus (Daud.)

Resident—savana I—common.

104. LONG-CRESTED HAWK-EAGLE.

Lophaëtus occipitalis (Daud.)

Resident—savana—common.

MOUNTED.

S.G.M. 1003, ♀, El Eghreitish (Kor.), Jan., 1914, N.G.H. (A.L.B.).

SKINS.

*S.G.M. 170, ♂, Meridi (B.G.), Feb., 1916, C.C.

*S.G.M. 1703, ♀, Kajo Kaji (Mon.), Mar., 1917, J.H.M.

105. NORTHERN LIZARD-BUZZARD.

Kaupifalco monogrammicus monogrammicus (Temm.)

Resident—savana—fairly common.

MOUNTED.

S.G.M. 1479, ♀, Kajo Kaji (Mon.), Mar., 1915, A.L.B. (A.L.B.)

SKINS.

*S.G.M. 175, ♀, 176, ♀, Yambio (B.G.), Mar., 1916, C.C.

106. SHORT-TOED OR SNAKE EAGLE.

Circaetus gallicus (Gmel.)

Winter visitor—arid—fairly common.

MOUNTED.

*S.G.M. 2850, ♂, Erkowit (R.S.), Sep., 1924, W.W.B. (R.C.)

107. BROWN HARRIER-EAGLE.

Circaetus cinereus Vieill.

Resident—savana—fairly common.

108. BLACK-BREASTED HARRIER-EAGLE.

Circaetus pectoralis Smith.

Resident—savana—not common.

109. BEAUDOUIN'S HARRIER-EAGLE.

Circaetus beaudouini Verr.

Resident—Kordofan—not common.

110. SMALLER BANDED HARRIER-EAGLE.

Circaetus cinerascens Müll.

Resident—savana—not common.

111. GRASSHOPPER BUZZARD-EAGLE.

Butastur rufipennis (Sund.)

Resident—throughout—common.

MOUNTED.

S.G.M. 275, ♀, Meshra Zeraf (U.N.), Jan., 1914, W.P.L. (A.L.B.).

SKINS.

*S.G.M. 178, ♂, Wau (B.G.), July-Aug., 1916, C.C.

112. BATELEUR.

Terathopius ecaudatus (Daud.)

Resident—throughout—fairly common.

MOUNTED.

S.G.M. 3020, ♀, Khartoum, Jan., 1926, M.H. (R.C.).

113. AFRICAN RIVER-EAGLE.

Cuncuma vocifer (Daud.)

Resident—coast and rivers—fairly common.

MOUNTED.

*S.G.M. 192, ♀, near Malakal (U.N.), July, 1920, W.H.M.P. (R.C.)

SKINS.

*S.G.M. 173, ♂, Renk, (U.N.), W.H.M.P.

114. AFRICAN LAMMERGEYER.

Gypaetus barbatus meridionalis Keys and Blas.

Resident—Red Sea Hills—not common.

115. STEPPE BUZZARD.

Buteo buteo vulpinus (Gloger).

Winter visitor—savana—fairly common.

116. LONG-LEGGED BUZZARD.

Buteo ferox ferox (Gmel.)

Winter visitor—savana (jebels)—fairly common.

117. AUGUR BUZZARD.

Buteo rufofuscus augur.

Resident—Red Sea Hills and savana (jebels)—fairly common.

MOUNTED.

S.G.M. 1397, ♂, Kajo Kaji (Mon.), Mar., 1915, A.L.B. (A.L.B.).

118. RED-NECKED BUZZARD.

Buteo auguralis Salvad.

Resident—savana—fairly common.

119. EUROPEAN SPARROW-HAWK.

Accipiter nisus nisus (Linn.)

Winter visitor—arid—rare.

120. ABYSSINIAN LITTLE SPARROW-HAWK.

Accipiter minulus intermedius Erl.

Resident—savana II—fairly common.

121. BLACK SPARROW-HAWK.

Accipiter melanoleucus Smith.

Resident—savana II —rare.

122. RÜPPELL'S GOSHAWK.

Astur badius sphenurus (Rüpp.)

Resident—savana and arid (acacia forest)—common.

MOUNTED.

S.G.M. 1009, ♂, 1010, ♂, Khartoum, July, 1913, A.L.B. (A.L.B.).
SKINS.

*S.G.M. 182, ♀, 183, ♀, Meridi (B.G.), Feb., 1916, C.C.

*S.G.M. 184, ♀, Khartoum, Sep., 1922, W.W.B.

*S.G.M. 2173, ♀, Khartoum, Dec., 1922, R.C.

123a. WHITE NILE CHANTING GOSHAWK.

Melireax metabates metabates Heugl.

Resident—savana and arid (acacia-grass)—common.

MOUNTED.

†S.G.M. 1593, ♀, Zeidab (Ber.), Feb., 1921, H.W.B. (R.C.).
SKINS.

*S.G.M. 1696, ♀, Torit (Mon.), Nov., 1917, J.H.R.Y.

*S.G.M. 1693, ♂, 1694, ♂, Kajo Kaji (Mon.), Mar. and Apr., 1917, J.H.M.

*S.G.M. 177, ♂, Malakal (U.N.), July, 1920, W.H.M.P.

†*S.G.M. 1695, ♀, 2210, ♂, Wad Medani (B.N.), Nov., 1919, and Oct., 1923, H.W.B.

†S.G.M. 2537, ♂, Wad Medani (B.N.), Dec., 1923, W.W.B.

†S.G.M. 3277, ♂, Rahad River, near Medani (B.N.), Mar., 1924, W.W.B.

†*S.G.M. 2127, ♂, 3021, ♂, Khartoum, Dec., 1920, and May, 1925, R.C.

S.G.M. 3195, ♀, Melut (U.N.), Nov., 1925, J.W.C.

123b. SAHARA CHANTING GOSHAWK.

Melireax metabates neumanni Hart.

Resident—arid (scrub)—common.

SKINS.

‡S.G.M. 2856, ♂, Khor Hudi, Atbara River (Ber.), July, 1924, W.W.B.

*S.G.M. 2855, ♀, Sinkat (R.S.), Sep., 1924, W.W.B.

124. GABAR GOSHAWK.

Melierax gabar (Daud.)

Resident—savana and arid (acacia forest)—common.

MOUNTED.

S.G.M. 1006, ♀, Shendi (Ber.), May, 1913, A.L.B. (A.L.B.)

S.G.M. 1007, ♂, Khartoum, Jan., 1913, A.L.B. (A.L.B.)

§ S.G.M. 1513, ♂, Rejaf (Mon.), Apr., 1915, A.L.B. (A.L.B.).
SKINS.

*S.G.M. 189, ♂, Dongola Town (Don.), Nov., 1921, H.H.K.

*S.G.M. 190, ♀, Komi Island (Don.), Nov., 1921, H.H.K.

*S.G.M. 196, ♀, 848, ♀, Abu Fatma (Don.), Nov., 1921, and Oct., 1922, H.H.K.

*S.G.M. 197, ♂, Megauda (Don.), Dec., 1920, H.H.K.

*S.G.M. 844, ♀, Khandak (Don.), Oct., 1922, H.H.K.

*S.G.M. 847, ♀, §843, ♀, Bergeig (Don.), Oct., 1922, H.H.K.

*S.G.M. 849, ♂, Kermia (Don.), Oct., 1922, H.H.K.

*S.G.M. 187, ♀, 188, ♂, 189, ♂, Zeidab (Ber.), June, 1921, W.E.G.

S.G.M. 2857, ♂, Kitlab (Ber.), Nov., 1924, W.W.B.

*S.G.M. 191, ♀, Zeidab (Ber.) Mar., 1921, H.W.B.

*S.G.M. 2203, ♂, 2218, ♀, §2240, ♂, Wad Medani (B.N.), Sep. and Oct., 1923,
H.W.B.

§*S.G.M. 185, ♂, Meridi (B.G.), Feb., 1916, C.C.

§S.G.M. 3196, ♂, Talodi (N.M.), Jan., 1926, J.W.C.

S.G.M. 3197, ♀, 3198, ♂, Talodi (N.M.), Feb., 1926, J.W.C.

†—Birds from north of about 14° N. Lat. are more or less intermediate *M. m. metabates* > *neumanni*.

‡—Intermediate *M. m. neumanni* > *metabates*.

§—Melanistic form.

125. HEN-HARRIER.

Circus cyaneus (Linn.)

Occurrence doubtful.

126. MONTAGUE'S HARRIER.

Circus pygargus (Linn.)

Winter visitor—sudd—fairly common.

MOUNTED.

S.G.M. 2446, ♂, Medani (B.N.), Dec., 1923, W.W.B. (R.C.),

SKINS.

*S.G.M. 2445, ♂, Wad Medani (B.N.), Dec., 1923, W.W.B.

*S.G.M. 2853, ♂, 2854, ♂, Erkowit (R.S.), Sep., 1924, W.W.B.

127. PALLID HARRIER.

Circus macrourus (Gmel.)

Winter visitor—throughout—common.

MOUNTED.

S.G.M. 841, 842, ♀, Letti Basin (Don.), Dec., 1922, H.H.K. (R.C.)

SKINS.

*S.G.M. 171, ♀, Letti Basin (Don.), Dec., 1922, H.H.K.

*S.G.M. 2452, ♂, Khartoum, Jan., 1924, E.H.M.

*S.G.M. 2444, ♂, 3022, ♀, Wad Medani (B.N.), Dec., 1923, and Jan., 1924, W.W.B.

*S.G.M. 2211, ♂, Wad Medani (B.N.), Nov., 1923, H.W.B.

*S.G.M. 2130, ♂, Malek (Mon.), Mar., 1923, A.S.

*S.G.M. 1680, ♂, Kajo Kaji (Mon.), Mar., 1917, J.H.M.

128. MARSH-HARRIER.

Circus aeruginosus aeruginosus (Linn.)

Winter visitor—sudd—common.

MOUNTED.

S.G.M. 1017, ♂, Khartoum, Feb., 1913, A.L.B. (A.L.B.).

*S.G.M. 2447, ♀, Wad Medani (B.N.), Dec., 1923, W.W.B. (R.C.).

129. AFRICAN HARRIER-HAWK.

Gymnogenys typicus typicus (Smith).

Resident—savana—fairly common.

Family *PANDIONIDÆ*.

130. OSPREY.

Pandion haliaetus haliaetus (Linn.)

Resident—coast and rivers—common.

MOUNTED.

*S.G.M. 901, ♀, Suakin (R.S.), June, 1923, W.W.B. (R.C.).

SKINS.

*S.G.M. 902, ♂, Suakin (R.S.), June, 1923, W.W.B.

Order - - **GALLIFORMES.**

Sub-Order TURNICES.

Family **TURNICIDÆ.**

KEY TO SPECIES.

- | | |
|--|--|
| Sides of head, neck and breast spotted
with black ... | Turnix sylvatica, 131. |
| Sides of head, neck and breast not
spotted ... | Ortyxelos meiffrenii, 132. |

131. KURRICHANE BUTTON-QUAIL.

Turnix sylvatica lepurana (Smith).

Resident—savana—not common.

132. QUAIL-PLOVER.

Ortyxelos meiffrenii (Vieill.)

Resident—arid, west (acacia-grass)—common.

Sub-Order GALLI.

Family **PHASIANIDÆ.**

KEY TO SPECIES.

- | | | |
|--|--|---|
| 1. { | Size small ; length 6.5 ins. or under
(wing, under 4.2 ins.) | 2 |
| | Size large ; length over 7 ins. (wing
over 5 ins.) | 5 |
| 2. { | Under parts slate-grey and chestnut | <i>Excalfactoria adansoni</i> , ♂, 142. |
| | Under parts black and rufous... | <i>Coturnix delegorguei</i> , ♂, 141. |
| | Under parts light-coloured ... | 3 |
| 3. { | Feathers of upper parts with con-
spicuous whitish shaft-streaks ... | 4 |
| | Feathers of upper parts without, or
with only indistinct, whitish shaft-
streaks | <i>Excalfactoria adansoni</i> , ♀, 142. |
| 4. { | Primaries barred on their outer webs ;
under parts whitish | <i>Coturnix coturnix</i> , 140. |
| | Primaries not barred ; under parts
rufous-buff | <i>Coturnix delegorguei</i> , ♀, 141. |
| | 5. { | Plumage black, spotted with white ... | Numida meleagris, 144. |
| Plumage black, spotted with pale blue | | <i>Guttera edouardi</i> , 145. |
| Plumage not black, spotted with white
or blue | | 6 |
| 6. { | Feet and toes bright red ... | 7 |
| | Feet and toes yellow or orange ... | 10 |
| 7. { | Upper parts with conspicuous whitish
markings | 8 |
| | Upper parts without conspicuous
whitish markings | 9 |

8. { Feathers of under parts with conspicuous black centres; closed wing appearing barred *Francolinus clappertoni*, 137.
 { Feathers of under parts without dark centres; closed wing without barred appearance *Francolinus sephæna*, 135.
9. { Centres of feathers of upper parts rufous; a uniform buff patch on centre of breast *Ptilopachus petrosus*, 143.
 { Centres of feathers of upper parts dark brown; no buff patch on centre of breast *Francolinus squamatus*, 138.
10. { General plumage vinous fawn ... *Ammoperdix heyi*, 133.
 { General plumage not vinous fawn ... 11
11. { Under parts barred *Francolinus coqui*, 134.
 { Under parts blotched or spotted ... 12
12. { Plumage slaty grey with chestnut markings *Francolinus erckeli*, 139.
 { Plumage brown with blackish markings *Francolinus icterorhynchus*, 136.

133. NUBIAN SEESEE.

Ammoperdix heyi cholmleyi Grant.

Resident—jebels (Red Sea and North Berber Province)—common.

MOUNTED.

S.G.M. 1233, ♂, Jebel Karbosh (R.S.), Mar., 1912, A.L.B. (A.L.B.).

S.G.M. 1234, ♀, Gebeit (R.S.), Mar., 1912, A.L.B. (A.L.B.).

134. SCHLEGEL'S COQUI FRANCOLIN.

Francolinus coqui schlegelii Heugl.

Resident—Bahr el Ghazal—rare.

135. COL. GRANT'S CRESTED FRANCOLIN.

Francolinus sephæna grantii Hartl.

Resident—savana III—fairly common.

SKINS.

*S.G.M. 2925, ♂, Rejaf (Mon.), Jan., 1925, H.H.K.

136a. HEUGLIN'S DOUBLE-SPURRED FRANCOLIN.

Francolinus icterorhynchus icterorhynchus Heugl.

Resident—savana IV—common.

MOUNTED.

S.G.M. 1290, ♂, Raffile (B.G.), Feb., 1908, A.L.B. (A.L.B.).

136b. DYBOWSKI'S DOUBLE-SPURRED FRANCOLIN.

Francolinus icterorhynchus dybowskii Oust.

Resident—savana III—common.

MOUNTED.

S.G.M. 1389, ♂, Khor Kaia (Mon.), Feb., 1915, A.L.B. (A.L.B.).

137a. CLAPPERTON'S FRANCOLIN.

Francolinus clappertoni clappertoni Childr.

Resident—Darfur and Kordofan—common.

137b. WHITE NILE CLAPPERTON FRANCOLIN.

Francolinus clappertoni heuglini Neum.

Resident—Upper Nile, northern Mongalla and eastern Bahr el Ghazal Provinces—common.

137c. UGANDA CLAPPERTON FRANCOLIN.

Francolinus clappertoni gedgei Grant.

Resident—savana III—common.

SKINS.

*S.G.M. 2140, ♂, 2141, ♀, Malek (Mon.), Mar., 1923, A.S.

137d. ABYSSINIAN CLAPPERTON FRANCOLIN.

Francolinus clappertoni sharpii Grant.

Resident—savana II—common.

138. LAKE VICTORIA SCALY FRANCOLIN.

Francolinus squamatus zappeyi Mearns.

Resident—savana III and IV—fairly common.

139. ERKOWIT FRANCOLIN.

Francolinus erckeli pentoni Praed.

Resident—Erkowit, Red Sea Hills—common.

SKINS.

S.G.M. 2863, ♂, *2864, ♂ imm., 2861, ♀j, Erkowit (R.S.), Sep., 1924, W.W.B.

140. COMMON QUAIL.

Coturnix coturnix coturnix (Linn.)

Winter visitor—throughout—common.

MOUNTED.

S.G.M. 1235, ♂, 1236, ♂, Khartoum, Nov., 1912, and Sep., 1913, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 2435, ♂, 2244, ♀, 2401 ♀, Wad Medani (B.N.), Sep. and Oct., 1923, H.W.B.

*S.G.M. 1545, ♂ ?, Khartoum, Aug., 1918, J. Rhodes.

*S.G.M. 2178, ♀, Khartoum, Sep., 1922, W.W.B.

S.G.M. 3237, ♂, Khor Hanoyet, P. Sudan (R.S.), Mar., 1926, H.H.K.

141. HARLEQUIN QUAIL.

Coturnix delegorguei Deleg.

Resident—savana—fairly common.

142. BLUE QUAIL.

Excalfactoria adansoni (Verr.)

Resident—savana IV—not common.

143a. KORDOFAN STONE-PARTRIDGE OR COCKYOLLY.

Ptilopachus petrosus brehmi Neum.

Resident—arid, west (acacia-grass)—fairly common.

SKINS.

S.G.M. 1232, ♂, Khor Nabag (Kor.), Nov., 1913, N.G.H. (A.L.B.).

SKINS.

S.G.M. 1, ♂, 2, ♂, El Obeid (Kor.), Aug., 1921, J.E.M.M.

143b. BAHR EL GHAZAL STONE-PARTRIDGE OR COCKYOLLY.

Ptilopachus petrosus butleri Scl. and Praed.

Resident—savana I—common.

SKINS.

S.G.M. 3184, ♂, 3185, ♂, 3187, ♀, 3188, ♀, 3189, ♀, 3190, ♂, Talodi (N.M.), Dec., 1925—Feb., 1926, J.W.C.

143c. LADO STONE-PARTRIDGE OR COCKYOLLY.

Ptilopachus petrosus emini Neumann.

Resident—savana III and IV—common.

SKINS.

*S.G.M. 1770, ♂, Kajo Kaji (Mon.), Apr., 1917, J.H.M.

*S.G.M. 1771, ♂, 1772, ♀, 1773, ♂, Opari (Mon.), Feb., 1917, J.H.M.

144a. SENNAR TUFTED GUINEAFOWL.

Numida meleagris meleagris (Linn.)

Resident—arid (acacia forest)—abundant.

SKINS.

S.G.M. 2540, ♀, 2541, ♂, Rahad River, near Medani (B.N.), Mar. and Apr., 1924, W.W.B.

144b. UGANDA TUFTED GUINEAFOWL.

Numida meleagris major Hartl.

Resident—savana—abundant.

SKINS.

S.G.M. 2129, ♂, 2142, ♀, Malek (Mon.), Mar., 1923, A.S.

145. UGANDA CRESTED GUINEAFOWL.

Guttera edouardi sethsmithi Neum.

Resident—highland I—not common.

SKINS.

†S.G.M. 3 (no data).

† Probably this race.

Order—**GRUIFORMES.**

Family *RALLIDÆ.*

KEY TO SPECIES.

- | | | | |
|----|--|--|--|
| 1. | { Upper parts spotted, blotched or streaked 2 | | |
| | Upper parts uniformly coloured ... 6 | | |
| 2. | { Feathers of upper parts with dark centres only 3 | | |
| | { Feathers of upper parts with white spots or streaks, as well as with some dark centres 4 | | |
| 3. | { Under wing-coverts chestnut... ... <i>Crex crex</i> , 146. | | |
| | { Under wing-coverts barred with black and white <i>Crecopsis egregia</i> , 147. | | |
| 4. | { Breast spotted with white; size large, wing over 4.5 ins. ... <i>Porzana porzana</i> , 149. | | |
| | { Breast unspotted; size smaller, wing under 4.5 ins. 5 | | |
| 5. | { Under wing-coverts uniform brown; size smaller, wing under 3.7 ins. ... <i>Porzana pusilla</i> , 150. | | |
| | { Under wing-coverts uniform olive grey; size larger, wing over 3.8 ins. <i>Porzana parva</i> , 151. | | |
| 6. | { Upper parts black or slaty grey; bill white or greenish, never red ... 7 | | |
| | { Upper parts olive green or olive brown; bill red, at least in part ... 8 | | |
| 7. | { Size smaller, wing under 4 ins. ... <i>Limnocorax flavirostra</i> , 148. | | |
| | { Size larger, wing over 7 ins. ... <i>Fulica atra</i> , 155. | | |
| 8. | { Upper parts olive green; under parts reddish blue <i>Porphyruia allenii</i> , 152. | | |
| | { Upper parts olive brown; under parts brown or grey 9 | | |
| 9. | { Size larger, wing over 6 ins.; basal half of both mandibles red ... <i>Gallinula chloropus</i> , 153. | | |
| | { Size smaller, wing under 6 ins.; no red on lower mandible <i>Gallinula angulata</i> , 154. | | |

146. CORN-CRAKE or LAND-RAIL.

Crex crex (Linn.)

Winter visitor—throughout—fairly common.

MOUNTED.

S.G.M. 1218, ♀, 1219, ♂, Khartoum, Sep., 1913, A.L.B. (A.L.B.).

S.G.M. 1225, ♂, Knock, Co. Down, Ireland, May, 1912, A.L.B. (Sheals).

SKINS.

*S.G.M. 2174, ♂, Khartoum, Dec., 1922, R.C.

S.G.M. 2431, ♀, Wad Medani (B.N.), Sep., 1923, H.W.B.

147. AFRICAN CRAKE.

Crecopsis egregia (Peters).

Resident—coast and sudd—not common.

148. BLACK CRAKE.

Limnocorax flavirostra (Swains.).

Resident—rivers and sudd—common.

MOUNTED.

*S.G.M. 1220, ♂, Lake No (U.N.), Feb., 1914, H.L. (A.L.B.).

SKINS.

*S.G.M. 1705, ♀, 1706, ♂, Kajo Kaji (Mon.), Mar., 1917, J.H.M.

149. SPOTTED CRAKE.

Porzana porzana (Linn.)

Spring and autumn passage migrant—common.

MOUNTED.

S.G.M. 1221, ♀, 1222, ♂, Khartoum, Oct., 1913, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 17, ♂, Zeidab (Ber.), Apr., 1921, W.E.G.

S.G.M. 3023, ♀, Khartoum, Mar., 1925, R.C.

S.G.M. 2997, ♀, Khartoum, May, 1925, H.H.K.

150. BAILLON'S CRAKE.

Porzana pusilla subsp.?

Wanderer (?)

MOUNTED.

S.G.M. 16, ♂, Zeidab (Ber.), Apr., 1921, W.E.G. (R.C.).

151. LITTLE CRAKE.

Porzana parva (Scop.)

Winter visitor—throughout—not common.

152. ALLEN'S REED-HEN.

Porphyrrula allenii (Thomson).

Resident—sudd—not common.

MOUNTED.

S.G.M. 1268, ♂, Taufikia (U.N.), June, 1909, A.L.B. (A.L.B.).

153. EUROPEAN MOORHEN.

Gallinula chloropus chloropus (Linn.)

Winter visitor—rivers (north)—occasional.

SKINS.

*S.G.M. 822, ♀, Khandak (Don.), Oct., 1922, H.H.K.

*S.G.M. 224, ♀, Letti (Don.), Nov., 1922, H.H.K.

154. LESSER MOORHEN.

Gallinula angulata Sund.

Resident—rivers (south) and sudd—not common.

SKINS.

*S.G.M. 18, ♂, Rahad (Kor.), Aug., 1921, J.E.M.M.

*S.G.M. 2233, ♀, Wad Medani (B.N.), Aug., 1923, H.W.B.

155. EUROPEAN COOT.

Fulica atra atra Linn.

Winter visitor—rivers (north)—not common.

MOUNTED.

S.G.M. 1362, ♀, Khartoum, Dec., 1914, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 1704, ♂, Arabnarti (Don.), Nov., 1918, R.C.

*S.G.M. 781, ♀, 782, ♀, 783 ♀, Letti (Don.), Nov., 1922, H.H.K.

Family *JACANIDÆ*.

KEY TO SPECIES.

{ Larger ; length about 10.0 ins. (wing about 5.5 ins.)	...	...	...	<i>Actophilus africanus</i> , 156.
Smaller ; length about 6.0 ins. (wing about 3.5 ins.)	...	...	...	<i>Microparra capensis</i> , 157.

156. AFRICAN JACANA.

Actophilus africanus (Gmel.)

Resident—sudd and rivers (south)—abundant.

MOUNTED.

S.G.M. 1267, ♂, Renk (U.N.), May, 1909, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 62, ♀, Wau (B.G.), July-Aug., 1916, C.C.

157. SMALLER JACANA.

Microparra capensis (Smith).

Resident—sudd—not common.

Family *BALEARICIDÆ*.

KEY TO SPECIES.

1.	{ A crown of straw-like bristles on top of head	...	...	...	<i>Balearica pavonina</i> , 158.
		...	...	...	2
2.	{ A broad band of white on sides of face and neck ; top of head naked, except for bristles, red in adults	...	...	...	<i>Megalornis grus</i> , 160.
		...	...	...	A narrow white band from behind eye, meeting its fellow on nape ; crown of head feathered, grey ... <i>Anthropoides virgo</i> , 159.

158. SUDAN CROWNED CRANE.

Balearica pavonina ceciliae Mitchell.

Resident—rivers (south)—common.

159. DEMOISELLE CRANE.

Anthropoides virgo (Linn.)

Winter visitor—arid (acacia-grass) and rivers—common.

160. EUROPEAN CRANE.

Megalornis grus grus (Linn.)

Winter visitor—arid (acacia-grass) and rivers—abundant.

Family OTIDIDÆ.

KEY TO SPECIES.

1. { Size large (over 30 ins. in length) ... 2
Size small (under 30 ins. in length) ... 4
2. { Middle of crown and hind-neck
greyish with vermiculations; wing-
coverts like rest of upper parts ... *Choriotis arabs*, 161.
Middle of crown black, hind-neck
orange rufous; wing coverts black
and white 3
3. { Throat and breast slate-grey *Neotis cafra*, 163.
Throat and breast black *Neotis burchellii*, 162.
4. { Under parts mostly black 5
Under parts white or light coloured ... 7
5. { A black line down centre of entire
throat 6
No black line down centre of throat ... *Lophotis savilei*, 166.
6. { Rump and tail like rest of upper parts *Lissotis melanogaster*, ♂, 167.
Rump and tail black *Lissotis hartlaubii*, ♂, 168.
7. { Head and neck of same general colour
as upper parts 8
Head and neck coloured differently to
upper parts 9
8. { Tail with five distinct blackish bars ... *Lissotis melanogaster*, ♀, 167.
Tail with only indistinct barring ... *Lissotis hartlaubii*, ♀, 168.
9. { Crown of head black and grey *Eupodotis senegalensis*, 165.
Crown of head tawny colour *Neotis nuba*, 164.

161. ARABIAN BUSTARD.

Choriotis arabs (Linn.)

Resident—savana and arid (scrub and acacia-grass)—very common.

162. BURCHELL'S BUSTARD.

Neotis burchellii (Heugl.)

Only known from type [Sennar.]

163. DENHAM'S BUSTARD.

Neotis cafra denhami (Children).

Resident—arid, west (acacia-grass), and savana I—common.

SKINS.

*S.G.M. 2367, ♂, Wad Medani (B.N.), Oct., 1923, H.W.B.

164. NUBIAN BUSTARD.

Neotis nuba (Cretzsch.).

Resident—arid (scrub)—not common.

165. SENEGAL BUSTARD.

Eupodotis senegalensis (Vieill.).

Resident—arid, west (acacia-grass), and savana I—common.

MOUNTED.

S.G.M. 1228, ♂, Um Ruaba (Kor.), May, 1913, A.L.B. (A.L.B.).

SKINS.

S.G.M. 3183, ♀, Talodi (N.M.), Jan., 1926, J.W.C.

166. SAVILE'S BUSTARD.

Lophotis savilei Lynes.

Resident—arid, west (acacia-grass)—common.

167. BLACK-BELLIED BUSTARD.

Lissotis melanogaster (Rüpp.)

Resident—savana III and IV (migrating northwards in summer)—fairly common.

SKINS.

*S.G.M. 1678, ♂, Torit (Mon.), July, 1918, J.H.R.Y.

168. HARTLAUB'S BUSTARD.

Lissotis hartlaubii (Heugl.)

Resident—savana II—fairly common.

Order - - CHARADRIIFORMES.

Sub-Order LIMICOLÆ.

Family CHARADRIIDÆ.

KEY TO SPECIES. †

1. { No hind toe 2
Hind toe present 10
2. { Bill longer than head *Hæmatopus ostralegus*, 188.
Bill shorter, or as long as, head 3
3. { A sharp spur on bend of wing ... 4
No spur, though often with a blunt projection on bend of wing ... 5
4. { With face-wattles *Xiphidopterus albiceps*, 183.
Without face-wattles *Hoplopterus spinosus*, 182.
5. { With face-wattles *Sarciophorus tectus*, 185.
Without face-wattles 6
6. { Wing over 6.3 ins. *Charadrius dominicus*, 177.
Wing under 6.3 ins., over 4.7 ins. ... 7
Wing under 4.7 ins. 8
7. { Outer tail-feathers white with a single blackish band near tip *Charadrius hiaticula*, 169.
Outer tail-feathers entirely white, or with only a trace of brown *Charadrius leschenaulti*, 174.
Outer tail-feathers pale brown, edged with white *Charadrius asiaticus*, 176.
8. { With two blackish bands across chest *Charadrius tricollaris*, 173.
With a single black band across chest *Charadrius dubius*, 170.
With no black band across chest ... 9
9. { A white collar on hind neck continuous with white of under parts *Charadrius alexandrinus*, 171.
A white collar on hind neck separated from white of under parts by a black band running from ear coverts to mantle *Charadrius pecuarius*, 172.
10. { Head crested *Vanellus vanellus*, 179.
Head not crested 11
11. { Tarsus shorter than middle toe with claw; tip of bill turned upwards *Arenaria interpres*, 187.
Tarsus as long as, or longer than, middle toe with claw 12
12. { With face-wattles *Afribyx senegallus*, 184.
Without face-wattles 13
13. { First primary the longest *Squatarola squatarola*, 178.
First primary shorter than second ... 14
14. { Toes long; middle toe longer than two-thirds the length of tarsus *Hemiparra crassirostris*, 186.
Toes short; middle toe little or no longer than half the length of tarsus 15
15. { Tail with a black bar; wing over 7.3 ins. *Chettusia gregaria*, 180.
Tail pure white; wing under 7.3 ins. *Vanellochettusia leucura*, 181.

†—After Reichenow, Die Vogel Afrikas.

169. SIBERIAN RINGED PLOVER.

Charadrius hiaticula tundræ (Lowe.)

Winter visitor—rivers and coast—fairly common.

SKINS.

- *S.G.M. 82, ♂, near Singa (Fung), May, 1911, A.L.B.
- *S.G.M. 83, ♂, Fashoda (U.N.), May, 1909, A.L.B.
- *S.G.M. 801, ♀, Bergeig (Don.), Oct., 1922, H.H.K.
- *S.G.M. 2348, ♀, Wad Medani (B.N.), Nov., 1923, W.W.B.
- *S.G.M. 2876, ♀, 2877, ♂, 2878, ♀, Suakin (R.S.), Oct., 1924, W.W.B.

170. LITTLE RINGED PLOVER.

Charadrius dubius curonicus Gmel.

Winter visitor—rivers—common.

MOUNTED.

- S.G.M. 1243, ♂, 1244, ♂, Khartoum, Dec., 1912, and Apr., 1913, A.L.B. (A.L.B.)

SKINS.

- *S.G.M. 81, ♀, Mongalla (Mon.), Oct., 1909, A.L.B.
- *S.G.M. 80, ♀, Khartoum, Apr., 1910, A.L.B.
- *S.G.M. 130, ♀, Erris (Don.), Nov., 1920, H.H.K.
- *S.G.M. 128, ♂, Zeidab (Ber.), Feb., 1921, H.W.B.
- *S.G.M. 1781, ♂, 1782, ♀, Wad Medani (B.N.), Oct., 1919, H.W.B.
- *S.G.M. 2305, ♂, 2298, ♀, Wad Medani (B.N.), Sep. and Oct., 1923, H.W.B.
- *S.G.M. 2340, ♀, 2341, ♂, Wad Medani (B.N.), Nov., 1923, W.W.B.

171a. KENTISH PLOVER.

Charadrius alexandrinus alexandrinus Linn.

Winter visitor—rivers and coast—abundant.

MOUNTED.

- S.G.M. 1365, ♂, Khartoum, Nov., 1914, A.L.B. (A.L.B.)

SKINS.

- *S.G.M. 129, ♀, Khartoum, Feb., 1921, R.C.
- *S.G.M. 942, ♂, Trinkitat (R.S.), May-June, 1923, W.W.B.
- *S.G.M. 943, ♂, 945, ♀, Suakin (R.S.), May and June, 1923, W.W.B.
- *S.G.M. 2879, ♂, Suakin (R.S.), Oct., 1924, W.W.B.

171b. EASTERN KENTISH PLOVER.

Charadrius alexandrinus seebohmi Hart. and Jacks.

Resident—coast—not common.

172. KITTLITZ'S SAND-PLOVER.

Charadrius pecuarius pecuarius Temm.

Resident—rivers—fairly common.

MOUNTED.

- S.G.M. 1242, ♂, Khartoum, Apr., 1913, A.L.B. (A.L.B.).

SKINS.

- *S.G.M. 74, ♀, Genetti (Don.), Jan., 1921, H.H.K.
- *S.G.M. 78, ♂, Bergeig (Don.), Nov., 1920, H.H.K.

173. THREE-BANDED PLOVER.

Charadrius tricollaris tricollaris Vieill.

Resident—coast and rivers—not common.

174. GREAT SAND-PLOVER.

Charadrius leschenaulti Less.

Resident—coast—fairly common.

SKINS.

*S.G.M. 936, ♀, 938, ♀, 939, ♂, Suakin (R.S.), June, 1923, W.W.B.

*S.G.M. 2874, ♂, 2875, ♀, Suakin (R.S.), Oct., 1924, W.W.B.

175. DOTTEREL.

Charadrius morinellus Linn.

Winter visitor—rivers (north)—rare.

176. CASPIAN PLOVER.

Charadrius asiaticus Pallas.

Winter visitor—coast and rivers—abundant.

MOUNTED.

S.G.M. 1238, ♂, 1239, ♀, 1240, ♂, Khartoum, Apr., 1913, A.L.B. (A.L.B.)

S.G.M. 1241, ♂, Khartoum, Dec., 1913, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 70, ♀, Khartoum, Feb., 1913, A.L.B.

*S.G.M. 73 ♂, Khartoum, Mar., 1912, A.L.B.

*

177. EASTERN GOLDEN PLOVER.

Charadrius dominicus fulvus Gmel.

Winter visitor—rivers (north)—rare.

178. GREY PLOVER.

Squatarola squatarola squatarola (Linn.)

Winter visitor—coast and rivers (north)—not common.

179. LAPWING.

Vanellus vanellus (Linn.)

Wanderer—north—rare.

180. SOCIALE PLOVER.

Chettusia gregaria (Pallas).

Winter visitor—arid—rare.

181. WHITE-TAILED PLOVER.

Vanellochettusia leucura (Licht.)

Winter visitor—arid—fairly common.

MOUNTED.

S.G.M. 1251, ♀, 1252, ♂, Khartoum, Mar., 1913, A.L.B. (A.L.B.).

182. SPUR-WINGED PLOVER.

Hoplopterus spinosus (Linn.)

Resident—rivers—very common.

MOUNTED.

S.G.M. 1247, ♂, Khartoum, Feb., 1913, A.L.B. (A.L.B.).

S.G.M. 1248, ♀, Khartoum, Dec., 1912, A.L.B. (A.L.B.).

SKINS.

S.G.M. 52, ♂, North of Shambé (B.G.), Jan., 1910, A.L.B.

S.G.M. 53, ♀, Kuri (Don.), Oct., 1920, H.H.K.

S.G.M. 1788, ♀, 1789, ♀, Makwar (B.N.), Dec., 1919, H.W.B.

S.G.M. 2407, ♀, Wad Medani (B.N.), Oct., 1923, H.W.B.

S.G.M. 2361, ♀, Wad Medani (B.N.), Nov., 1923, W.W.B.

S.G.M. 3181, ♂, Renk (U.N.), Nov., 1925, J.W.C.

183. SWORD-WINGED PLOVER.

Xiphidiopterus albiceps (Gould.)

Resident—rivers (extreme south)—rare.

MOUNTED.

S.G.M. 1282, ♀ Kajali (B.G.), Feb., 1908, A.L.B. (A.L.B.).

184. SENEGAL WATTLED PLOVER.

Afribyx senegallus senegallus (Linn.)

Resident—savana (rivers)—fairly common.

MOUNTED.

S.G.M. 1281, ♂, Kenisa (U.N.), Jan., 1910, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 1790, ♀, Rejaf (Mon.), 1917, J.H.M.

185. RED-WATTLED PLOVER.

Sarciophorus tectus tectus (Bodd.)

Resident—savana (clearings), arid (thorn-forest)—common.

MOUNTED.

S.G.M. 1276, ♀, Mongalla (Mon.), "Summer," 1909, A.L.B. (A.L.B.).

SKINS.

S.G.M. 2461, ♂, 3264, ♂, Rahad River, near Medani (B.N.), Dec., 1923, and Feb., 1924, H.W.B.

186. WHITE NILE LONG-TOED LAPWING.

Hemiparra crassirostris crassirostris (Hartl.)

Resident—rivers (extreme south)—not common.

187. TURNSTONE.

Arenaria interpres interpres (Linn.)

Winter visitor—coast, occasionally rivers (north)—fairly common.

SKINS.

*S.G.M. 933, ♀, 935, ♂, Suakin (R.S.), May-June, 1923, W.W.B.

*S.G.M. 934, ♂, Trinkitat (R.S.), May-June, 1923, W.W.B.

S.G.M. 2871, ♂, 2872, ♀, Suakin (R.S.), Oct., 1924, W.W.B.

188. OYSTER-CATCHER.

Hæmatopus ostralegus ostralegus Linn.

Winter visitor—coast and rivers—rare.

Family RECURVIROSTRIDÆ.

KEY TO SPECIES.

Bill straight; legs very long, tarsus over 4.5 ins.	...	...	<i>Himantopus himantopus</i> , 190.
	Bill curved upwards; legs medium, tarsus under 4 ins.	...	<i>Recurvirostra avosetta</i> , 189.

189. AVOCET.

Recurvirostra avosetta Linn.

Resident—coast and rivers (north)—rare.

190. BLACK-WINGED STILT.

Himantopus himantopus (Linn.)

Resident—coast and rivers—common.

MOUNTED.

S.G.M. 1215, ♀, Khartoum, May, 1913, A.L.B. (A.L.B.).

SKINS.

S.G.M. 44, ♀, 46, ♀, Zeidab (Ber.), Mar., 1921, H.W.B.

S.G.M. 1778, ♀, Makwar (B.N.), Dec., 1919, H.W.B.

S.G.M. 2870, ♀, Suakin (R.S.), Oct., 1924, W.W.B.

S.G.M. 2424, ♀, 2425, ♂, Wad Medani (B.N.), Nov., 1923, H.W.B.

Family SCOLOPACIDÆ.

KEY TO SPECIES. †

1. { Hind toe present 2
Hind toe absent *Crocethia alba*, 201.
2. { Third and fourth toes free (without a web) 3
A partial web between third and fourth toes 12
3. { Difference between longest primary and shortest secondary more than half the length of wing 8
Difference between longest primary and shortest secondary less than half the length of wing 4
4. { Tail almost half as long as wing, or longer; tip of bill straight ... 5
Tail hardly a third the length of wing; tip of bill decurved *Rostratula benghalensis*, 195.
5. { The three outer tail-feathers pure white, or with blackish cross-bars, but without a rusty brown wash ... 6
The three outer tail-feathers partly white but washed with rusty brown 7
6. { Three outer tail-feathers without bars or spots *Capella media*, 192.
Three outer tail-feathers with obsolete spots or bars *Capella nigripennis*, 193.
7. { Wing over 4.5 ins. *Capella gallinago*, 191.
Wing under 4.5 ins. *Limnocryples minima*, 194.
8. { Larger, wing over 6 ins. *Calidris canutus*, 200.
Smaller, wing under 6 ins. 9
9. { Wing over 4 ins., bill over 0.75 ins. ... 10
Wing under 4 ins., bill under 0.75 ins. 11
10. { Bill straight. Central upper tail-coverts dark brown *Erolia alpina*, 197.
Tip of bill curved downwards. Upper tail-coverts pure white or with blackish bars *Erolia testacea*, 196.
11. { Outer tail-feathers pure white ... *Erolia temminckii*, 199.
Outer tail-feathers washed with pale brown, at least on their outer webs *Erolia minuta*, 198.
12. { Bill curved downwards and distinctly longer than tarsus 13
Bill straight or curved upwards 14
13. { A narrow pale buffish streak running down centre of entire crown ... *Numeneus phœopus*, 213.
Top of head pale brown streaked with dark brown *Numeneus arquata*, 212.

† After Reichenow, Die Vogel Afrikas.

14. { Bill considerably longer than tarsus 15
 Bill not longer than tarsus ... 17
15. { Third and fourth toes only webbed,
 second and third free ... 16
 Second and third toes, as well as third
 and fourth, webbed ... *Terekia cinerea*, 203.
16. { Tail barred brown and white ... *Limosa lapponica*, 211.
 Tail black, white at base ... *Limosa limosa*, 210.
17. { Tail square or only slightly rounded... 18
 Tail strongly rounded (the inner
 feathers more than 1 c.m. longer
 than outer ones) *Actitis hypoleucus*, 204.
18. { Larger, wing over 5.9 ins. ... 19
 Smaller, wing under 5.9 ins. ... 21
19. { Rump white ... 20
 Rump not white ... *Philomachus pugnax*, 202.
20. { Outer tail feathers barred ... *Tringa totanus*, 206.
 Outer tail feathers not barred ... *Tringa nebularia*, 208.
21. { Rump and back white ... *Tringa stagnatilis*, 207.
 Rump *only* white, back brown ... 22
22. { Wing over 5.3 ins. ... *Tringa ochropus*, 205.
 Wing under 5.3 ins. ... *Tringa glareola*, 209.

191. COMMON SNIPE.

Capella gallinago gallinago (Linn.)

Winter visitor—rivers—fairly common.

MOUNTED.

S.G.M. 1223, ♂, 1224, ♀, Khartoum, Oct., 1913, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 586, ♀, Letti (Don.), Dec., 1922, H.H.K.

*S.G.M. 788, ♀, Abu Fatma (Don.), Oct., 1922, H.H.K.

*S.G.M. 56, ♂, 57, ♀, Khartoum, Feb., 1922, R.C.

*S.G.M. 58, ♂, Zeidab (Ber.), Mar., 1921, H.W.B.

*S.G.M. 2220, ♂, 2221, ♂, 2223, ♀, Wad Medani (B.N.), Sep., and Oct., 1923,
 H.W.B.

192. DOUBLE SNIPE.

Capella media (Lath.)

Winter visitor—rivers—not common.

MOUNTED.

S.G.M. 1514, ♀, Rejaf (Mon.), Apr., 1915, A.L.B. (A.L.B.).

193. ETHIOPIAN SNIPE.

Capella nigripennis (Bp.)

Resident—rivers (extreme south)—not common.

194. JACK SNIPE.

Limnocryptes minima (Brünn.)

Winter visitor—rivers—not common.

SKINS.

*S.G.M. 111, ♀, Khartoum, Dec., 1910, Mr. Osborne.

195. PAINTED SNIPE.

Rostratula benghalensis (Linn.)

Resident—rivers—not common.

MOUNTED.

S.G.M. 1509, ♂, Kajo Kaji (Mon.), Apr., 1915, A.L.B. (A.L.B.).

S.G.M. 1515, ♀, Rejaf (Mon.), Apr., 1915, A.L.B. (A.L.B.).

196. CURLEW-SANDPIPER.

Erolia testacea (Pallas).

Winter visitor—coast and rivers—abundant.

MOUNTED.

S.G.M. 1261, ♀, Khartoum, Nov., 1912, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 99, ♀, Khartoum, Nov., 1910, A.L.B.

*S.G.M. 100, ♀, El Dueim (W.N.), May, 1909, A.L.B.

*S.G.M. 102, ♂, Fashoda (W.N.), May, 1909, A.L.B.

*S.G.M. 950, ♀, 951, ♀, 954, ♂, Trinikitat (R.S.), May-June, 1923, W.W.B.

197. DUNLIN.

Erolia alpina alpina (Linn.)

Winter visitor—coast (also recorded from Kordofan)—fairly common.

SKINS.

*S.G.M. 948, ♀, Suakin (R.S.), June, 1923, W.W.B.

198. LITTLE STINT.

Erolia minutus (Leisl.)

Winter visitor—coast and rivers—abundant.

MOUNTED.

S.G.M. 1263, ♂, 1264, ♀, Khartoum, Dec., 1912, and May, 1913, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 103, ♂, Khartoum, Nov., 1908, A.L.B.

*S.G.M. 106, ♂, 107, ♂, Tangassi Is. (Don.), Nov., 1920, H.H.K.

*S.G.M. 108, ♀, 109, ♀, 110, ♂, Morghani Is. (Don.), Jan., 1921, H.H.K.

*S.G.M. 790, ♀, 791, ♀, Bergeig (Don.), Oct., 1922, H.H.K.

*S.G.M. 2326, ♂, Wad Medani (B.N.), Oct., 1923, H.W.B.

*S.G.M. 955, ♂, Trinkitat (R.S.), May-June, 1923, W.W.B.

S.G.M. 2880, ♂, Suakin (R.S.), Oct., 1924, W.W.B.

199. TEMMINCK'S STINT.

Erolia temminckii (Leisl.)

Winter visitor—coast and rivers (north)—not common

SKINS.

*S.G.M. 2284, ♀, 2318, ♂, Wad Medani (B.N.), Oct., 1923, H.W.B.

200. KNOT.

Calidris canutus canutus (Linn.)

Winter visitor—rivers (north)—rare.

201. SANDERLING.

Crocethia alba (Pallas).

Winter visitor—coast and rivers—fairly common.

MOUNTED.

S.G.M. 1237, ♀, Khartoum, Apr., 1913, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 947, ♀, Trinkitat (R.S.), May-June, 1923, W.W.B.

202. RUFF.

Philomachus pugnax (Linn.)

Winter visitor—arid (acacia-grass), and savana—abundant.

MOUNTED.

S.G.M. 1256, ♂, 1257, ♂, 1258, ♀, Khartoum, Dec., 1912, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 61, ♂, Bergeig (Don.), Nov. 1920, H.H.K.

S.G.M. 786, ♂, 787, ♂, Bergeig (Don.), Oct., 1922, H.H.K.

*S.G.M. 1774, ♂, 1775, ♂, 1776, ♀, 1777, ♂, Wad Medani (B.N.), Sep. and Oct., 1919, H.W.B.

S.G.M. 2113, ♀, 2238, ♀, 2429, ♂, 2430, ♂, Wad Medani (B.N.), Sep.-Nov., 1923, H.W.B.

S.G.M. 59, ♀, Zeidab (Ber.), June, 1921, W.E.G.

S.G.M. 55, ♂, Khartoum, Oct., 1921, R.C.

S.G.M. 2890, ♂, Suakin (R.S.), Oct., 1924, W.W.B.

203. TEREK SANDPIPER.

Terekia cinerea (Güld.).

Winter visitor—coast—rare.

204. COMMON SANDPIPER.

Actitis hypoleucus (Linn.)

Winter visitor—rivers—common.

MOUNTED.

S.G.M. 1260, ♂, Khartoum, Dec., 1912, A.L.B. (A.L.B.)

SKINS.

*S.G.M. 86, ♀, Mongalla (Mon.), Oct., 1909, A.L.B.

*S.G.M. 89, ♂, 90, ♂, Mongalla (Mon.), July-Sep., 1908, A.L.B.

*S.G.M. 91, ♀, Rosieres (Fung), Sep., 1910, A.L.B.

*S.G.M. 88, ♂, Khartoum, Feb., 1912, A.L.B.

*S.G.M. 87, ♂, Shambe (B.G.), Dec., 1907, E. P. Blencow.

*S.G.M. 92, ♂, Morghani Is. (Don.), Jan., 1921, H.H.K.

*S.G.M. 93, ♀, Komi Is. (Don.), Nov., 1920, H.H.K.

*S.G.M. 94, ♀, Erris (Don.), Nov., 1920, H.H.K.

*S.G.M. 95, ♂?, Selim (Don.), Nov., 1920, H.H.K.

*S.G.M. 1783, ♀, Zeidab (Ber.), Sep., 1919, H.W.B.

*S.G.M. 2198, ♂, 2247, ♂, 2771, ♂, Wad Medani (B.N.), Aug., 1923, H.W.B.

*S.G.M. 96, ♂, Khartoum, Sep., 1921, R.C.

*S.G.M. 1784, ♀, Kajo Kaji (Mon.), Mar., 1917, J.H.M.

205. GREEN SANDPIPER.

Tringa ochropus Linn.

Winter visitor—rivers—fairly common.

MOUNTED.

S.G.M. 1262, ♂, Khartoum, Apr., 1913, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 793, ♀, Bergeig (Don.), Oct., 1922, H.H.K.

*S.G.M. 120, ♂, Argo Is. (Don.), Jan., 1921, H.H.K.

*S.G.M. 127, ♀, Molassi Is. (Don.), Jan., 1921, H.H.K.

*S.G.M. 125, ♀, Zeidab (Ber.), Mar., 1921, H.W.B.

*S.G.M. 2191, ♀, 2270, ♂, Wad Medani (B.N.), Sep., 1923, H.W.B.

*S.G.M. 2365, ♂?, Wad Medani (B.N.), Nov., 1923, W.W.B.

*S.G.M. 126, ♀, Khartoum, Feb., 1922, R.C.

206. REDSHANK.

Tringa totanus totanus (Linn.)

Winter visitor coast and rivers—not common.

MOUNTED.

S.G.M. 1579, ♀, Morghani Is. (Don.), Dec., 1920, H.H.K. (R.C.).

SKINS.

*S.G.M. 949, ♂, 2882 ♀, Suakin (R.S.), June, 1923, and Oct., 1924, W.W.B.

207. MARSH-SANDPIPER.

Tringa stagnatilis (Bechst.)

Winter visitor—rivers—fairly common.

SKINS.

- *S.G.M. 97, ♀, Khartoum, Dec., 1910, A.L.B.
- *S.G.M. 800, ♀, Kerma (Don.), Oct., 1922, H.H.K.
- *S.G.M. 114, ♀, 116, ♂, Zeidab (Ber.), Mar., 1921, H.W.B.
- *S.G.M. 118, ♂, Khartoum, Feb., 1922, W.W.B.
- *S.G.M. 231, ♀, 2984, ♀, Wad Medani (B.N.), Nov., 1923, and June, 1924, W.W.B.
- *S.G.M. 2883, ♀, 2884, ♂, 2885, ♂, Atbara (Ber.), July, 1924, W.W.B.

208. GREENSHANK.

Tringa nebularia (Gunn.)

Winter visitor—coast and rivers—common.

MOUNTED.

S.G.M. 1259, ♂, Khartoum, Jan., 1913, A.L.B. (A.L.B.).

SKINS.

- *S.G.M. 47, ♂, Zeidab (Ber.), Mar., 1921, H.W.B.
- *S.G.M. 2212, ♀, Wad Medani (B.N.), Oct., 1923, H.W.B.
- S.G.M. 3276, ♂, Wad Medani (B.N.), Dec., 1923, W.W.B.
- S.G.M. 2889, ♂, Suakin (R.S.), Oct., 1924, W.W.B.

209. WOOD-SANDPIPER.

Tringa glareola Linn.

Winter visitor—rivers—common.

SKINS.

- *S.G.M. 122, ♀, 798, ♂?, 795, ♀, 797, ♂, Bergeig (Don.), Nov., 1920, and Oct., 1922, H.H.K.
- *S.G.M. 113, ♂, Zeidab (Ber.), Apr., 1921, W.E.G.
- *S.G.M. 123, ♂, 124, ♂, Zeidab (Ber.), Mar., 1921, H.W.B.
- *S.G.M. 2196, ♀, 1779, ♀, 1780, ♀, Wad Medani (B.N.), Nov., 1919 and Sep., 1923, H.W.B.
- *S.G.M. 112, ♀, Khartoum, Sep., 1921, R.C.

210. BLACK-TAILED GODWIT.

Limosa limosa limosa (Linn.)

Winter visitor—rivers—common.

MOUNTED.

S.G.M. 1226, ♀, 1227, ♂, Khartoum, Dec., 1902, and Oct., 1913, A.L.B. (A.L.B.).

SKINS.

- *S.G.M. 802, ♂, 803, ♀, Bergeig (Don.), Oct., 1922, H.H.K.
- *S.G.M. 42, ♀, 43, ♀, Khartoum, Oct., 1921, R.C.

211. BAR-TAILED GODWIT.

Limosa lapponica lapponica (Linn.)

Winter visitor—coast—not common.

212a. CURLEW.

Numenius arquata arquata (Linn.)

Winter visitor ? resident (not breeding)—coast and rivers—fairly common.

MOUNTED.

S.G.M. 1271, ♂, Khartoum, Apr., 1914, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 2881, ♀, Suakin (R.S.), Oct., 1924, W.W.B.

212b. EASTERN CURLEW.

Numenius arquata lineatus Cuv.

Winter visitor—coast and rivers—fairly common.

SKINS.

*S.G.M. 956, ♀, Suakin (R.S.), June, 1923, W.W.B.

213. WHIMBREL.

Numenius phaeopus (Linn.)

Winter visitor—rivers—fairly common.

Family GLAREOLIDÆ.

KEY TO SPECIES.

1. { Tail strongly forked 2
 Tail square, slightly forked or rounded 3
2. { Under wing-coverts chestnut ... *Glareola pratincola*, 218.
 Under wing-coverts black ... *Glareola nordmanni*, 219.
 3. { Tarsus short, less than twice the length of middle toe 4
 Tarsus long, more than twice the length of middle toe 5
 4. { General colour of upper parts ashy brown; flight-feathers blackish brown *Galachrysa nuchalis*, 220.
 General colour of upper parts slate-grey and black; flight-feathers white and black *Pluvianus aegyptius*, 221.
 5. { Bill with both mandibles curved down-wards 6
 Bill with upper mandible curved down-wards, lower straight 7
 6. { A black patch on centre of lower-breast *Cursorius temminckii*, 215.
 No black patch on breast *Cursorius cursor*, 214.
 7. { Two chestnut bands on chest ... *Rhinoptilus cinctus*, 216.
 A single black band on chest ... *Rhinoptilus chalcopterus*, 217.

214. CREAM-COLOURED COURSER.

Cursorius cursor cursor (Lath.)

Winter visitor—arid—fairly common.

MOUNTED.

S.G.M. 1249, ♂, 1250, ♂, Khartoum, Feb., 1913, A.L.B. (A.L.B.).

SKINS.

S.G.M. 51, ♀, Omdurman (Kh.), Apr., 1910, A.L.B.

215. TEMMINCK'S COURSER.

Cursorius temminckii temminckii Swains.

Resident—(summer visitor ?)—savana—rare.

216. HEUGLIN'S COURSER.

Rhinoptilus cinctus cinctus (Heugl.)

Resident—savana—rare.

217. BRONZE-WING COURSER.

Rhinoptilus chalcopterus (Temm.)

Resident—savana—not common.

MOUNTED.

S.G.M. 1273, ♂, White Nile, near Tonga (U.N.), Feb., 1914, H.L. (A.L.B.).

S.G.M. 1447, ♀, Kajo Kaji (Mon.), Mar., 1915, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 2144, ♂, Malek (Mon.), Mar., 1923, A.S.

218a. EUROPEAN PRATINCOLE.

Glareola pratincola pratincola (Linn.)

Winter visitor—rivers—very common.

MOUNTED.

S.G.M. 1254, ♂, 1255, ♂, Khartoum, Dec., 1912, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 2147, ♀, Malek (Mon.), Mar., 1923, A.S.

218b. RED SEA PRATINCOLE.

Glareola pratincola limbata Rupp.

Resident—Red Sea Coast (?)—winter visitor to Nile Valley—common.

MOUNTED.

S.G.M. 1253, ♂, Khartoum, Dec., 1912, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 1786, ♀, 1787, ♀j, 2222, ♂j, Wad Medani (B.N.), Sep., 1919, and Oct., 1923, H.W.B.

219. BLACK-WINGED PRATINCOLE.

Glareola nordmanni Fisch.

Spring and autumn passage migrant—fairly common.

SKINS.

S.G.M. 2173, ♀, Khartoum, Sep., 1921, R.C.

S.G.M. 1875, ♂, Kajo Kaji (Mon.), Apr., 1917, J.H.M.

220a. WHITE-COLLARED PRATINCOLE.

Galachrynia nuchalis nuchalis (Gray).

Resident—rivers (north)—rare.

220b. EMIN'S WHITE-COLLARED PRATINCOLE.

Galachrynia nuchalis emini (Shell.)

Resident—rivers (extreme south)—not common.

221. EGYPTIAN PLOVER OR CROCODILE-BIRD.

Pluvianus cegyptius (Linn.)

Resident—rivers—common.

MOUNTED.

S.G.M. 1245, ♀, Khartoum, Dec., 1912, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 69, ♂, Roseires (Fung), July, 1910, A.L.B.

*S.G.M. 68, ♂, Wau (B.G.), Aug., 1920, C.C.

S.G.M. 65, ♀, 66, ♀, Wad Medani (B.N.), Aug., 1921, J.E.M.M.

S.G.M. 2886, ♀, 2887, ♂, Atbara (Ber.), July, 1924, W.W.B.

S.G.M. 2426, ♂, 2428, ♀, Wad Medani (B.N.), Aug., 1919, H.W.B.

222. CRAB-PLOVER.

Deomas ardeola Payk

Resident—coast—common.

SKINS.

S.G.M. 927, ♂, 929, ♂, 930, ♀, Suakin (R.S.), May and June, 1923, W.W.B.

S.G.M. 928, ♂, Trinkitat (R.S.), May-June, 1923, W.W.B.

Family BURHINIDÆ.

KEY TO SPECIES.

1. { Feathers of upper parts boldly barred
and spotted with blackish-brown *Burhinus capensis*, 225
Feathers of upper parts not boldly
barred and spotted 2
2. { With white and blackish-brown bars on
median wing-coverts ... *Burhinus oedicnemus*, 223.
Without white and blackish-brown
bars on median wing-coverts ... *Burhinus senegalensis*, 224.

223a. STONE-CURLEW.

Burhinus oedicnemus oedicnemus (Linn.)

Winter visitor—rivers—fairly common.

223b. PERSIAN STONE-CURLEW.

Burhinus oedicnemus astutus Hart.

Wanderer (?)—recorded from Red Sea Province.

224. SENEGAL STONE-CURLEW.

Burhinus senegalensis (Swains)

Resident—rivers—common.

MOUNTED.

S.G.M. 1573, ♂, 1572, ♀, Renk (U.N.), July, 1920, and June, 1922, W.H.M.P. (R.C.).

SKINS.

*S.G.M. 2927, ♀, 2928, ♂, Terrakeka (Mon.), Jan., 1925, H.H.K.

†*S.G.M. 2106, ♀, Ghaddar (Don.), Nov., 1920, H.H.K.

‡*S.G.M. 825, ♂, 826, ♂, 827, ♂, Kerma (Don.), Oct., 1922, H.H.K.

225a. DIKKOP.

Burhinus capensis capensis (Licht.)

Resident—savana I. (south)—fairly common.

225b. SUDAN DIKKOP.

Burhinus capensis affinis (Rüpp.)

Resident—arid (acacia-grass), savana I (north)—common.

SKINS.

S.G.M. 3182, ♀, Talodi (N.M.), Feb., 1926, J.W.C.

Sub-Order LARI.

Family *LARIDÆ*.

KEY TO SPECIES. ‡

1.	Bill with the upper mandible longer and bent down over the tip of the lower one. Tail square	2
		14
	Bill with both mandibles much com- pressed, the lower considerably longer than the upper	<i>Rynchops flavirostris</i> , 247.

†—If *B. senegalensis assimilis* (Bad.) is a recognisable form, these four birds should be placed with it. They are all distinctly greyer and slightly larger (wing 224-231 mm.) than those from further south.

‡—Partly after British Museum Catalogue of Birds.

2. { Head with a well defined hood of a darker colour than neck 3
 Head pure white 6
 Head neither pure white nor with a well defined hood 9
3. { Mantle clear gray 4
 Mantle dark brown to sooty 5
4. { Hood black *Larus ichthyaetus*, 230.
 Hood dark brown *Larus ridibundus*, 231.
5. { Hood and fore-neck jet-black ... *Larus leucophthalmus*, 232.
 Hood and fore-neck dark brown ... *Larus hemprichi*, 233.
6. { Smaller, wing under 13 ins. *Larus genetii*, 229.
 Larger, wing over 14 ins. 7
7. { Quills mostly black 8
 Quills mostly pale grey *Larus hyperboreus*, 228.
8. { Mantle sooty black to dark slate ... *Larus fuscus*, 227.
 Mantle pale blue-grey *Larus argentatus*, 226.
9. { Tail white or grey, usually with a dark terminal, or sub-terminal, band ; upper tail-coverts almost unspotted ; abdomen white or grey 10
 Tail and upper tail-coverts mottled with brownish ; abdomen brown ... 13
10. { Outermost primaries blackish or umber-brown 11
 Outermost primaries white edged with black *Larus ridibundus*, juv., 231.
11. { Larger, wing over 18 ins. *Larus ichthyaetus* juv., 230.
 Smaller, wing under 14 ins. 12
12. { Outermost tail-feathers mottled with greyish *Larus leucophthalmus*, juv., 232.
 Outermost tail-feathers with no grey *Larus hemprichi*, juv., 233.
13. { Quills sooty brown to black ; smaller, wing 16-16.5 ins. *Larus fuscus*, juv., 227.
 Quills dark umber with paler inner webs ; larger, wing 16.75-18 ins. ... *Larus argentatus*, juv., 226.
 Quills clay-brown with paler inner webs ; larger, wing 17-18 ins. ... *Larus hyperboreus*, juv., 228.
14. { Tail very distinctly forked, outermost feathers considerably longer than innermost ; toes completely webbed 15
 Tail only slightly forked, outermost feathers very little longer than middle ones ; toes only half webbed ... 28
 Tail wedge-shaped, slightly forked in middle, fourth pair of feathers the longest *Anous stolidus*, 246.

15. { Larger, wing over 15.5 ins., tail less than one-third the length of wing ... *Hydroprogne caspia*, 235.
 { Smaller, wing under 14.5 ins., tail more than one-third the length of wing ... 16
16. { Tarsus very long, exceeding middle toe and claw; bill rather short and robust; tail less than half the length of wing 17
 { Tarsus short, less than middle toe and claw; bill long and slender; tail more than half the length of wing 17
17. { Larger, wing over 9.5 ins. 18
 { Smaller, wing less than 7 ins. *Sterna albifrons*, 241.
18. { Larger, wing over 11 ins. 23
 { Smaller, wing under 10.5 ins. 19
19. { Forehead black to base of bill 20
 { Front of forehead white 21
20. { Upper tail-coverts white in strong contrast with the grey of upper parts *Sterna hirundo*, 236.
 { Upper tail-coverts grey like the upper parts *Sterna repressa*, 237.
21. { Crown of head not mottled *Sterna anæsthetus*, 242.
 { Crown (and plumage generally) tending to be mottled (immature and winter birds)... 22
22. { Tail-feathers grey throughout ... *Sterna repressa* juv., and winter, 237.
 { Tail-feathers grey with some white on the outer half of inner webs ... *Sterna anæsthetus*, juv., and winter, 242.
 { Tail-feathers white with grey outer webs *Sterna hirundo*, juv., and winter, 236.
23. { Forehead black to base of bill ... 24
 { Front of forehead white 25
24. { Bill black, yellowish towards tip ... *Sterna sandvicensis*, 238.
 { Bill orange-yellow to red *Sterna bengalensis*, 239.
25. { Bill black or horn colour, generally with some yellow at base or tip ... *Sterna sandvicensis*, juv., and winter, 238.
 { Bill entirely yellow 26
26. { Top of head mottled (immature) ... 27
 { Top of head not mottled *Sterna bergii*, 240.
27. { Wing over 12.5 ins. *Sterna bergii*, juv., and winter, 240.
 { Wing under 12.5 ins. *Sterna bengalensis*, juv., and winter, 239.
28. { Under parts black or dark grey (summer plumage) 29
 { Under parts white (winter plumage and young) 31

29. { Upper tail-coverts and tail white;
 under wing-coverts black *Chlidonias leucoptera*, 244.
 Upper tail-coverts and tail grey;
 under wing-coverts not black ... 30
30. { Bill orange-red (blood-red in life);
 chin and sides of face white; throat
 and breast grey passing into black-
 ish grey on abdomen; under wing-
 coverts white *Chlidonias leucopareia*, 245.
 Bill black; chin and sides of face
 black, like the underparts; under
 wing-coverts pale grey *Chlidonias nigra*, 243.
31. { Tail white *Chlidonias leucoptera*, winter, 244.
 Tail grey 32
32. { Rump grey, like the back 33
 Rump white, in contrast with the grey
 of the back and tail *Chlidonias leucoptera*, juv., 244.
33. { Larger; bill stouter; feet with webs *Chlidonias leucopareia*, juv., and
 much incised winter, 245.
 Smaller; bill more slender; feet with *Chlidonias nigra*, juv., and winter,
 webs less incised 243.

226. YELLOW-LEGGED HERRING-GULL.

Larus argentatus cachinnans Pallas.

Winter visitor—Red Sea and rivers—not common.

227. LESSER BLACK-BACKED GULL.

Larus fuscus fuscus Linn.

Winter visitor (occasionally summer)—Red Sea and rivers—fairly common.

MOUNTED.

S.G.M. 910, ♂?, Trinkitat (R.S.), May-June, 1923, W.W.B. (R.C.).

SKINS.

*S.G.M. 911, ♂, Suakin (R.S.), June, 1923, W.W.B.

228. GLAUCOUS GULL.

Larus hyperboreus Gunn.

Winter visitor—Red Sea—not common.

229. ROSY GULL.

Larus genei Brême

Resident (?)—Red Sea—not common.

230. THE FISH-GULL.

Larus ichthyaëtus Pallas

Winter visitor—Red Sea—not common.

231. BLACK-HEADED GULL.

Larus ridibundus ridibundus Linn.

Winter visitor—Red Sea and rivers (north)—not common.

232. WHITE-EYED GULL.

Larus leucopterus Temm.

Resident—Red Sea—abundant.

233. HEMPRICH'S GULL.

Larus hemprichii (Bruch.)

Resident—Red Sea—abundant.

SKINS.

*S.G.M. 913, ♀, Trinkitat (R.S.), May-June, 1923, W.W.B.

*S.G.M. 2865, ♀, 2866, ♀, 2867, ♂, 2868, ♂?, Suakin (R.S.), Oct., 1924, W.W.B.

234. GULL-BILLED TERN.

Gelochelidon nilotica nilotica (Gmel.)

Winter visitor—rivers—common.

SKINS.

*S.G.M. 34, ♀, 35, ♀, 36, ♀, Khartoum, Oct., 1921, R.C.

235. CASPIAN TERN.

Hydroprogne caspia (Pallas)

Resident—coast (rivers in winter)—fairly common.

SKINS.

*S.G.M. 914, ♀, Suakin (R.S.), June, 1923, W.W.B.

236. COMMON TERN.

Sterna hirundo Linn.

Winter visitor—Red Sea—not common.

237. WHITE-CHEEKED TERN.

Sterna repressa Hartert.

Resident—Red Sea—abundant.

SKINS.

*S.G.M. 918, ♂, Trinkitat (R.S.), May-June, 1923, W.W.B.

*S.G.M. 921, ♂j, 922, ♂, Suakin (R.S.), June, 1923, W.W.B.

*S.G.M. 2891, ♂, Suakin (R.S.), Oct., 1924, W.W.B.

238. SANDWICH TERN.

Sterna sandvicensis sandvicensis Lath.

Winter visitor—Red Sea—not common.

239. ARABIAN LESSER CRESTED TERN.

Sterna bengalensis par (Mathews and Iredale.)

Resident—Red Sea—fairly common.

SKINS.

*S.G.M. 915, ♀, Trinkitat (R.S.), May-June, 1923, W.W.B.

240. RED SEA SWIFT TERN.

Sterna bergii velox Cretzsch.

Resident—Red Sea—fairly common.

241. INDIAN LITTLE TERN.

Sterna albifrons saundersi Hume.

Resident—Red Sea—common.

SKINS.

*S.G.M. 924, ♂, 925, ♂, Suakin (R.S.), June, 1923, W.W.B.

242. RED SEA BRIDLED TERN.

Sterna anaethetus fuligula Licht.

Resident—Red Sea—fairly common.

243. BLACK TERN.

Chlidonias nigra nigra (Linn.)

Winter visitor—rivers—fairly common.

244. WHITE-WINGED BLACK TERN.

Chlidonias leucoptera (Temm.)

Winter visitor—rivers—common.

MOUNTED.

S.G.M. 1209, ♀, Shendi (Ber.), May 1913, A.L.B. (A.L.B.).

S.G.M. 1210, ♂, 1211, ♂, Khartoum, June, 1913, A.L.B. (A.L.B.).

SKINS.

S.G.M. 2893, ♂, Atbara (Ber.), July, 1924, W.W.B.

245. WHISKERED TERN.

Chlidonias leucopareia leucopareia (Temm.)

Winter visitor—rivers—common.

SKINS.

*S.G.M. 2189, ♂, Khartoum, Sep., 1921, R.C.

*S.G.M. 2214, ♂, Wad Medani (B.N.), Oct., 1923, H.W.B.

*S.G.M. 39, ♂, 40, ♂, 41, ♂, Geili (Kh.), Apr., 1923, E.H.M.

S.G.M. 2892, ♂, Atbara (Ber.), July, 1924, W.W.B.

246. RED SEA NODDY.

Anous stolidus plumbeigularis Sharpe.

Resident—Red Sea—fairly common.

247. AFRICAN SKIMMER.

Rynchops flavirostris Vieill.

Resident—rivers—very common.

SKINS.

*S.G.M. 2183, ♂, 2184, ♀, Geili (Kh.), Apr., 1923, E.H.M.

Sub-Order PTEROCLII.

Family PTEROCLIDIDÆ.

KEY TO SPECIES.

1. { With one, or more, dark bands on
breast 2
Without a dark band on breast ... 5
2. { A black bar on forehead 3
No black bar on forehead 4
3. { Sides of throat and upper breast
narrowly barred with black ... *Eremialector lichtensteinii*, ♂, 251.
Throat and upper breast uniform
greenish buff *Eremialector quadricinctus*, ♂, 252.
4. { Abdomen chestnut; breast-band com-
plete *Pterocles senegalensis*, ♂, 249.
Abdomen black with buffish bars;
breast-band broken *Pterocles senegalensis*, ♀, 249.

5.	<i>Breast</i> spotted	...	...	...	6
	<i>Breast</i> barred	...	...	...	7
	<i>Breast</i> uniform	...	...	...	8
6.	Abdomen and flanks black, barred with buff; upper parts barred with black	...	...	...	<i>Pterocles senegalensis</i> , juv., 249.
	Centre of abdomen black, flanks uniform whitish buff; upper parts spotted with dull black	...	...	...	<i>Pterocles senegallus</i> , ♀ and juv., 248.
7.	Throat yellow	...	...	...	<i>Eremialector coronatus</i> , ♀, and juv., 250.
	Throat barred like the breast	...	...	...	<i>Eremialector lichtensteini</i> , ♀, and juv., 251.
8.	Throat yellow; abdomen not barred	...	...	...	9
	Throat not yellow; abdomen white barred with black	...	...	...	<i>Eremialector quadricinctus</i> , ♀, and juv., 252.
9.	Abdomen uniform sandy buff; a black line down centre of throat and two on forehead	...	...	...	<i>Eremialector coronatus</i> , ♂, 250.
	Centre of abdomen black; no black on throat and forehead	...	...	...	<i>Pterocles senegallus</i> , ♂, 248.

248. SENEGAL SANDGROUSE.

Pterocles senegallus (Linn.)

Resident—arid (scrub)—fairly common.

MOUNTED.

S.G.M. 1581, ♂, 1582, ♀, Letti basin (Don.), Dec., 1920, H.H.K. (R.C.).

SKINS.

*S.G.M. 805, ♀, Abu Fatma (Don.), Oct., 1922, H.H.K.

249. CHESTNUT-BELLIED SANDGROUSE.

Pterocles senegalensis senegalensis Licht.

Resident—arid (scrub)—abundant.

MOUNTED.

S.G.M. 1586, ♂, 1587, ♀, Megauda (Don.), Dec., 1920, H.H.K. (R.C.).

SKINS.

*S.G.M. 13, ♂, 14, ♀, Megauda (Don.), Dec., 1920, H.H.K.

S.G.M. 3279, ♂, Wad Medani (B.N.), Feb., 1924, V.P.W.

S.G.M. 2657, ♂, 2658, ♀, 2659, ♂, Gendettu (Ber.), Oct., 1924, W.W.B.

S.G.M. 3236, ♀, Khor Hanoyit, P. Sudan (R.S.), Apr., 1926, H.B.J.

250. CROWNED SANDGROUSE.

Eremialector coronatus coronatus (Licht.)

Resident—desert and arid—(thin scrub)—fairly common.

MOUNTED.

S.G.M. 1583, ♂, Ghaddar (Don.), Nov., 1920, H.H.K. (R.C.).

S.G.M. 1584, ♀, Letti basin (Don.), Dec., 1920, H.H.K. (R.C.).

SKINS.

*S.G.M. 10, ♀, 806, ♂, Letti basin (Don.), Nov., 1920, and Dec., 1922, H.H.K.

251. LICHTENSTEIN'S SANDGROUSE.

Eremialector lichtensteinii lichtensteinii (Temm.)

Resident—arid—fairly common.

MOUNTED.

S.G.M. 1585, ♂, Ghaddar (Don.), Dec., 1920, H.H.K. (R.C.).

S.G.M. 1601, ♀, Letti basin (Don.), Dec., 1921, H.H.K. (R.C.).

SKINS.

*S.G.M. 4, ♀, Jebel Meidab (Dar.), Feb., 1922, H.L. and W.P.L.

*S.G.M. 6, ♀, Sayah (Dar.), Feb., 1922, H.L. and W.P.L.

*S.G.M. 7, ♀, 9, ♂, Ghaddar (Don.), Nov. and Dec., 1921, H.H.K.

S.G.M. 2450, ♂, 2451, ♀, Khartoum, Jan., 1924, E.H.M.

*S.G.M. 2655, ♂, 2656, ♂j, Erkowit (R.S.), Sept., 1924, W.W.B.

252. EASTERN FOUR-BANDED SANDGROUSE.

Eremialector quadricinctus lowei Grant.

Resident—arid (acacia-forest) and savana—fairly common.

SKINS.

*S.G.M. 12, ♀, El Obeid (Kor.), Aug., 1921, J.E.M.M.

*S.G.M. 1546, ♂, Ikoto (Mon.), Feb., 1918, J.H.R.Y.

S.G.M. 2494, ♂, Rahad R. near Medani (B.N.), June, 1924, W.W.B.

S.G.M. 2926, ♂, near Kodok (U.N.), Mar., 1925, H.H.K.

Sub-Order COLUMBÆ.

Family COLUMBIDÆ.

KEY TO SPECIES.

1. { Under parts slate grey 2
 Abdomen yellow 3
 Under parts white to dark vinous brown 4
2. { Mantle maroon with some white flecks *Columba guinea*, 254.
 Mantle clear slate grey *Columba livia*, 253.
3. { Head and neck grey *Vinago waalia*, 264.
 Head and neck greenish yellow *Vinago calva*, 265.

4. { A collar of black edged with white on back of neck 5
 A patch of white-tipped black feathers on each side of neck ... *Streptopelia turtur*, 255.
4. { A collar of rufous-tipped black feathers on front and sides of neck *Stigmatopelia senegalensis*, 260.
 Whole front of face and throat black *Ena capensis*, ♂, 261.
 No black markings on neck 7
5. { Wing-coverts not grey; plumage very dark *Streptopelia semitorquata*, 256.
 Wing-coverts blue-grey; plumage paler 6

6. { Larger, wing over 6.5 ins., top of head slate grey; no loral streak... ... *Streptopelia decipiens*, 257.
 Smaller, wing 6-6.5 ins., top of head pale pinkish grey; no loral streak *Streptopelia roseogrisea*, 259.
 Smallest, wing under 6 ins., top of head wine-colour; a black loral streak from base of bill to eye ... *Streptopelia vinacea*, 258.
7. { Tail considerably longer than wing ... *Oena capensis*, ♀, 261.
 Tail shorter than wing ... 8
8. { Top of head brownish black; bill red at base, yellow or orange at tip ... *Turtur afer*, 262.
 Top of head clear blue-grey; bill dusky to black *Turtur abyssinica*, 263.

253a. SAHARAN ROCK-PIGEON.

Columba livia targia Geyr.

Resident—jebels (Darfur)—common.

253b. EGYPTIAN ROCK-PIGEON.

Columba livia schimperi Bp.

Resident—jebels (extreme north)—common.

MOUNTED.

†S.G.M. 1604, ♀, 1605, ♂, Jebel Barkel (Don.), Jan., 1921, H.H.K. (R.C.).

SKINS.

‡*S.G.M. 22, ♂, Jebel Barkel (Don.), Jan., 1921, H.H.K.

253c. BUTLER'S ROCK-PIGEON.

Columba livia butleri Meinertz.

Resident—jebels (Red Sea)—common.

SKINS.

§*S.G.M. 2666, ♂, Sinkat (R.S.), Sep., 1924, W.W.B.

254. SPECKLED PIGEON.

Columba guinea guinea Linn.

Resident—savana—common:

MOUNTED.

S.G.M. 1508, ♀, Kajo Kaji (Mon.), Apr., 1915, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 1637, ♀, 1638, ♀, 2107, ♂, 2108, ♂, Kajo Kaji (Mon.), Mar. and Apr., 1917, J.H.M.

† Dongola birds, though not quite typical, are nearest this form.

‡ This single specimen is much larger than *C. l. schimperi*, and comes nearest to *C. l. gaddi*.

§ Although taken from close to the type locality of *C. l. butleri*, this bird is nearly typical *C. l. palaeistica*. A considerable amount of interbreeding between wild and semi-domesticated birds occurs around the town of Sinkat, but there is no indication of a hybrid origin in this specimen.

255a. EUROPEAN TURTLE-DOVE.

Streptopelia turtur turtur (Linn.)

Winter visitor—arid (acacia-grass)—abundant.

MOUNTED.

S.G.M. 1208, ♂, Khartoum, Apr., 1913, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 25, ♂, Genetti (Don.), Jan., 1921, H.H.K.

*S.G.M. 26, ♂, Letti basin (Don.), Dec., 1921, H.H.K.

*S.G.M. 28, ♂, Tangassi Is. (Don.), Nov., 1920, H.H.K.

*S.G.M. 27, ♂, Badin (Don.), Jan., 1921, W.E.G.

255b. PERSIAN TURTLE-DOVE.

Streptopelia turtur arenicola (Hartert.)

Winter visitor (?)—arid (acacia-grass)—occasional.

SKINS.

*S.G.M. 2490, ♀, Wad Medani (B.N.), Feb., 1924, W.W.B.

*S.G.M. 2665, ♀, Sinkat (R.S.), Oct., 1924, W.W.B.

255c. EGYPTIAN TURTLE-DOVE.

Streptopelia turtur isabellina (Bp.)

Resident—extreme north—fairly common.

256. RED-EYED DOVE.

Streptopelia semitorquata semitorquata (Rüpp.)

Resident—savana—fairly common.

MOUNTED.

*S.G.M. 1556, ♂, Yei (Mon.), Dec., 1915, C.C. (R.C.).

257a. SUDAN MOURNING DOVE.

Streptopelia decipiens decipiens (Finsch and Hartl.)

Resident—arid—very common.

MOUNTED.

S.G.M. 1615, ♂, Debba (Don.), Dec., 1921, H.H.K. (R.C.).

SKINS.

S.G.M. 888, ♀, Debba (Don.), Dec., 1920, H.H.K.

S.G.M. 3275, ♀, Rahad River, near Medani (B.N.), Apr., 1924, W.W.B.

S.G.M. 2491, ♀, Wad Medani (B.N.), Jan., 1924, W.W.B.

S.G.M. 2663, ♀, Gendetu (Ber.), Oct., 1924, W.W.B.

257b. EAST AFRICAN MOURNING DOVE.

Streptopelia decipiens permista (Reichw.)

Resident—savana—very common.

258a. SUDAN VINACEOUS DOVE.

Streptopelia vinacea barbaru Antin.

Resident—savana—not common.

SKINS.

*S.G.M. 1639, ♂, Kajo Kaji (Mon.), Apr., 1917, H.J.M.

258b. BOGOSLAND VINACEOUS DOVE.

Streptopelia vinacea erythraea (Neum.)

Resident—Red Sea hills—not common.

259a. PINK-HEADED DOVE.

Streptopelia roseogrisea roseogrisea (Sund.)

Resident—throughout—abundant.

MOUNTED.

S.G.M. 1205, ♂, Khartoum, Jan., 1913, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 23, ♂, 24, ♂, Genetti (Don.), Jan., 1921, H.H.K.

S.G.M. 2492, ♂, 2493, ♂, Rahad River, near Medani (B.N.), Mar. and Apr., 1924,
W.W.B.

†*S.G.M. 931, ♂, 932, ♂, Tokar, (R.S.), June, 1923, W.W.B.

259b. ARABIAN PINK-HEADED DOVE.

Streptopelia roseogrisea arabica (Neum.)

Resident—Red Sea coast—common.

260a. CAPE LAUGHING -DOVE.

Stigmatopelia senegalensis aequatorialis (Erl.)

Resident—savana and Red Sea hills—common.

* † These two birds ought to be, by locality, *S. r. arabica*, yet they exactly match *S. r. roseogrisea*.

260b. SUDAN LAUGHING-DOVE.

Stigmatopelia senegalensis sudanensis Scl. and Praed.

Resident—arid—common.

MOUNTED.

S.G.M. 1606, ♂, Tambanarti (Don.), Dec., 1920, H.H.K. (R.C.).

SKINS.

*S.G.M. 29, ♂, Amentago (Don.), Nov., 1921, H.H.K.

*S.G.M. 30, ♀, Kuri (Don.), Oct., 1921, H.H.K.

*S.G.M. 808, ♂, Ghaddar (Don.), Oct., 1922, H.H.K.

*S.G.M. 809, ♂, Arab Hag (Don.), Oct., 1922, H.H.K.

*S.G.M. 811, ♂, Dongola Town, Oct., 1922, H.H.K.

S.G.M. 2661, ♀ O.E., 2662, ♂, Gendettu (Ber.), Aug., 1924, W.W.B.

261. NAMAQUA OR LONG-TAILED DOVE.

Ena capensis capensis (Linn.)

Resident—throughout—common.

MOUNTED.

S.G.M. 1206, ♀, 1207, ♂, Khartoum, Jan. and May, 1913, A.L.B. (A.L.B.).

SKINS.

S.G.M. 3274, ♂, Wad Medani (B.N.), Jan., 1924, W.W.B.

262. SENEGAL BLUE-SPOTTED WOOD-DOVE.

Turtur afer afer (Linn.)

Resident—savana—not common.

263. SUDAN BLACK-BILLED BLUE-SPOTTED WOOD-DOVE.

Turtur abyssinicus delicatula (Sharpe).

Resident—savana and arid (acacia forest)—fairly common.

MOUNTED.

S.G.M. 1317, ♀, 1318, ♂, Mongalla (Mon.), Aug., 1914, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 1631, ♂, Kajo Kaji (Mon.), Apr., 1917, J.H.M.

S.G.M. 2664, ♀, Kitab (Ber.), Nov., 1924, W.W.B.

264. BRUCE'S GREEN PIGEON.

Vinago waalia (Meyer).

Resident—savana—common.

MOUNTED.

S.G.M. 1413, ♀, Kajo Kaji (Mon.), Mar., 1915, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 1632, ♂, 1633, ♂?, 1634, ♂, 1635, ♀, Opari (Mon.), Feb., 1917, J.H.M.

S.G.M. 3177, ♀, 3178, ♂, 3179, ♂, 3180, ♂, Talodi (N.M.), Feb., 1926, J.W.C.

265. UELE RIVER GREEN PIGEON.

Vinago calva uellensis Reichw.

Resident—savana IV—fairly common.

Order - - CUCULIFORMES.

Sub-Order CUCULI.

Family CUCULIDÆ.

KEY TO SPECIES.

1. { Upper parts mostly green, with at least some metallic gloss 2
Upper parts not green and with no metallic gloss 8
2. { Wings short and rounded; difference between primaries and secondaries about half the length of tarsus ... *Ceuthmochares aereus*, 280.
Wings long and pointed; difference between primaries and secondaries more than the length of tarsus ... 3
3. { Upper parts metallic green, unbarred 4
Upper parts metallic green, barred with rufous 6
4. { Abdomen yellow *Chrysococcyx cupreus*, ♂, 273.
Abdomen white, with, or without, dark bars 6
5. { A patch of green on each side of chest; outer tail-feathers white with green spots or bars... *Lampronormpha klaasi*, ♂, 275.
No green on chest; outer tail-feathers green with white or chestnut spots ... *Lampronormpha caprius*, 274.
6. { Head ashy-black 7
Head rufous *Lampronormpha caprius*, juv., 274.
7. { Under parts white barred with green *Chrysococcyx cupreus*, ♀, 273.
Under parts buffy white barred with brown *Lampronormpha klaasi*, ♀, 275.
8. { Under parts white barred with black 9
Under parts not barred 10
9. { Larger, wing over 8 ins.; throat grey in adult *Cuculus canorus*, 266.
Smaller, wing under 8 ins.; throat rufous in adult *Cuculus solitarius*, 267.
10. { Hind claw long and straight (twice as long as other claws) 11
Hind claw short and curved, like others 14
11. { Under parts black *Centropus grillii*, 276.
Under parts not black 12

12. { Top of head and nape black, with a slight metallic gloss 13
 Top of head and nape dark brown with narrow buff-shaft streaks *Centropus superciliosus*, 279.
13. { Back brownish black; head and nape bluish black *Centropus monachus*, 277.
 Back rufous; head and nape greenish black *Centropus senegalensis*, 278.
14. { Tail longer than wing 15
 Tail equal to, or shorter than, wing ... *Pachycoccyx validus*, 269.
15. { Throat and chest streaked with black *Clamator cafer*, 272.
 Throat and chest uniform 16
16. { Larger, wing over 7 ins.; wing-coverts flecked with white *Clamator glandarius*, 270.
 Smaller, wing under 7 ins.; wing-coverts uniform *Clamator jacobinus*, 271.

266a. EUROPEAN CUCKOO.

Cuculus canorus canorus Linn.

Spring and autumn passage migrant (some wintering in south)—common.

MOUNTED.

S.G.M. 1167, ♂, 1168, ♂, Khartoum, Sep., 1913, A.L.B. (A.L.B.)

SKINS.

*S.G.M. 2193, ♂, 2231, ♀, Wad Medani (B.N.), Apr. and Sep., 1924, H.W.B.

*S.G.M. 268, ♀, Urbi (Don), Nov., 1920, H.H.K.

S.G.M. 3024, ♀, Khartoum, Oct., 1925, H.H.K.

*S.G.M. 2179, ♀, Khartoum, Sep., 1922, W.W.B.

S.G.M. 2706, ♂, Erkowit (R.S.), Sep., 1924, W.W.B.

266b. EASTERN CUCKOO.

Cuculus canorus telephonus Heine.

Winter visitor—occasional.

266c. AFRICAN CUCKOO.

Cuculus canorus gularis Stephens.

Resident—savana—common.

SKINS.

*S.G.M. 1647, ♂, Torit (Mon.), Oct., 1924, J.H.R.Y.

267. RED-CHESTED CUCKOO.

Cuculus solitarius Stephens.

Resident—savana—fairly common.

MOUNTED.

S.G.M. 1293, ♂, 1294, ♀, Mongalla (Mon.), Aug., 1914, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 270, ♂, 271, ♂, Yambio (B.G.), Mar., 1916, C.C.

268. JACKSON'S CUCKOO.

Cuculus jacksoni Sharpe.

Resident—savana—fairly common.

269. THICK-BILLED CUCKOO.

Pachycoccyx validus (Reichw.)

Resident—savana IV—not common.

270. GREAT SPOTTED CUCKOO.

Clamator glandarius (Linn.)

Resident (also winter visitor)—throughout—fairly common.

MOUNTED.

S.G.M. 1169, ♀, Khartoum, Dec., 1912, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 269, ♂, Letti basin (Don.), Nov., 1920, H.H.K.

S.G.M. 2700, ♂, O.S.E., Atbara (Ber.), Dec., 1924, W.W.B.

S.G.M. 1534, ♀, Kajo Kaji (Mon.), Jan., 1917, J.H.M.

*S.G.M. 1645, ♂, Rudu (Mon.), Feb., 1917, J.H.M.

*S.G.M. 1646, ♂, Opari (Mon.), Feb., 1917, J.H.M.

271. BLACK-AND-WHITE CUCKOO.

Clamator jacobinus (Bodd.)

Summer visitor (breeding ?)—savana and arid (acacia-forest)—fairly common.

MOUNTED.

S.G.M. 1324, ♂, Mongalla (Mon.), July, 1914, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 2190, ♂, 2208, ♀, Wad Medani (B.N.), Aug., 1923, H.W.B.

272. LEVAILLANT'S CUCKOO.

Clamator cafer (Licht.)

Summer visitor (breeding?)—savana—not common.

MOUNTED.

S.G.M. 1272, ♀, Roseires (Fung), July, 1910, A.L.B. (A.L.B.).

S.G.M. 1495, ♀, Kajo Kaji (Mon.), Mar., 1915, A.L.B. (A.L.B.).

273. EMERALD CUCKOO.

Chrysococcyx cupreus cupreus (Shaw.)

Resident—savana III—rare.

274. DIDRIC OR COPPERY CUCKOO.

Lampromorpha caprius (Bodd.)

Resident (migrating south in winter)—savana—common.

MOUNTED.

S.G.M. 1166, ♂, Giggig (Mon.), May, 1909, A.L.B. (A.L.B.)

S.G.M. 1302, ♂, 1342, ♀, Mongalla (Mon.), June and Aug., 1914, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 2109, ♀, 2278, ♀, Wad Medani (B.N.), Sep., 1923, H.W.B.

*S.G.M. 272, ♂, 273, ♂, Tembura (B.G.), Apr., 1916, C.C.

*S.G.M. 1648, ♀, Kajo Kaji (Mon.), Jan., 1917, J.H.M.

275. KLAAS' CUCKOO.

Lampromorpha klaasi (Stephens).

Resident (migrating south in winter)—savana—fairly common.

MOUNTED.

S.G.M. 1392, ♂, 1393, ♀, Kajo Kaji (Mon.), Feb., 1915, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 274, ♂, Meridi (B.G.), Jan., 1916, C.C.

*S.G.M. 1649, ♂, Rudu (Mon.), Feb., 1917, J.H.M.

*S.G.M. 1650, ♂, Opari (Mon.), Feb., 1917, J.H.M.

276. BLACK-CHESTED COUCAL.

Centropus grillii grillii Hartl.

Resident—savana and swamps—not common.

MOUNTED.

S.G.M. 1330, ♂, 1331, ♀, Mongalla (Mon.), July, 1914, A.L.B. (A.L.B.).

277. WEST AFRICAN BLUE-HEADED COUCAL.

Centropus monachus occidentalis Neum.

Resident—savana and swamps—common.

278. SENEGAL COUCAL.

Centropus senegalensis senegalensis (Linn.)

Resident—savana and swamps—common.

MOUNTED.

S.G.M. 1333, ♂, Mongalla (Mon.), "Summer," 1914, A.L.B. (A.L.B.).

S.G.M. 1536, ♂ ?, Kajo Kaji (Mon.), Apr., 1917, J.H.M. (R.C.).

SKINS.

*S.G.M. 1641, ♂, Kajo Kaji (Mon.), Jan., 1917, J.H.M.

*S.G.M. 1642, ♂, Opari (Mon.), Feb., 1917, J.H.M.

*S.G.M. 276, ♀, Yambio (B.G.), Mar., 1916, C.C.

*S.G.M. 275, ♀, Meridi (B.G.), Jan., 1916, C.C.

S.G.M. 3158, ♀, Talodi (N.M.), Jan., 1926, J.W.C.

279. WHITE-BROWED COUCAL.

Centropus superciliosus superciliosus Hempr. and Ehr.

Resident—savana and arid (acacia forest)—common.

MOUNTED.

S.G.M. 1332, ♂, Mongalla, "Summer," 1914, A.L.B. (A.L.B.).

S.G.M. 1594, ♀, Ikoto (Mon.), Feb., 1918, J.H.R.Y. (R.C.).

SKINS.

S.G.M. 2701, ♂, T.S.E., 2702, ♀, O.S.E., Khor Hudi, Atbara R. (Ber.), July, 1924,
W.W.B..

S.G.M. 2705, ♂, Kitiaib (Ber.), Nov., 1924, W.W.B..

S.G.M. 2232, ♀, Wad Medani (B.N.), Aug., 1913, V.P.W.

280. NIAM-NIAM GREEN COUCAL.

Centrochares aereus intermedius Sharpe.

Resident—savana IV—not common.

Family MUSOPHAGIDÆ.

KEY TO SPECIES.

- | | | | | |
|----|---|-----|-----|--|
| 1. | Plumage brightly coloured; wing-quills deep purplish red ... 2 | | | |
| | { Plumage brown or grey; wing-quills mostly black 4 | | | |
| 2. | Breast green ... | ... | ... | ... |
| | Breast not green ... | ... | ... | ... <i>Musophaga rossae</i> , 283. |
| 3. | Crest white ... | ... | ... | ... <i>Turacus leucolophus</i> , 282. |
| | Crest blackish ... | ... | ... | ... <i>Turacus leucotis</i> , 281. |
| 4. | Head crested ... | ... | ... | ... <i>Corythaixoides leucogaster</i> , 285. |
| | Head not crested ... | ... | ... | ... <i>Crinifer zonurus</i> , 284. |

281. WHITE-CHEEKED PLANTAIN-EATER.

Turacus leucotis leucotis (Rüpp.)

Wanderer—savana II—occasional.

282. WHITE-CRESTED LOURIE.

Turacus leucolophus (Heugl.)

Resident—savana—fairly common.

MOUNTED.

S.G.M. 1384, ♀, Khor Konyeka (Mon.), Feb., 1915, A.L.B. (A.L.B.).

S.G.M. 1386, ♀, Lado Nyopo (Mon.), Feb., 1915, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 1685, ♂, 1686, ♀, Opari (Mon.), Feb., 1917, J.H.M.

*S.G.M. 1688, ♀, W. Nile, near Kajo Kaji (Mon.), Feb., 1917, J.H.M.

*S.G.M. 1689, ♂, Rudu (Mon.), Mar., 1917, J.H.M.

*S.G.M. 772, ♂, 774, ♀, Meridi (B.G.), Jan., 1916, C.C.

S.G.M. 2936, ♀, Torit (Mon.), Feb., 1925, H.H.K.

283. CONGO VIOLET PLANTAIN-EATER.

Musophaga rossae Gould.

Resident—savana IV—not common.

284. ABYSSINIAN GREY PLANTAIN-EATER.

Crinifer zonurus (Rüpp.)

Resident—savana—very common.

MOUNTED.

S.G.M. 1173, ♀, Jebel Ehri (Kor.), Dec., 1913, N.G.H. (A.L.B.).

SKINS.

*S.G.M. 1690, ♀, 1691, ♂, Kajo Kaji (Mon.), Jan., 1917, J.H.M.

*S.G.M. 776, ♀, 777, ♂, Yambio (B.G.), Mar., 1916, C.C.

*S.G.M. 778, ♂, Meridi (B.G.), Jan., 1916, C.C.

S.G.M. 2935, ♂, Rejaf (Mon.), Jan., 1925, H.H.K.

S.G.M. 3193, ♀, Talodi (N.M.), Feb., 1926, J.W.C.

285. WHITE-BELLIED GOAWAY-BIRD.

Corythaixoides leucogaster (Rüpp.)

Resident—Highland I—not common.

MOUNTED.

S.G.M. 1537, ♀, Ikoto (Mon.), Feb., 1918, J.R.Y. (R.C.).

Sub-Order PSITTACI.

Family PSITTACIDÆ.

KEY TO SPECIES.

1. {
Plumage Green 2
Plumage grey or brown, not green ... 3
2. {
Tail longer than wing ; face green ... *Psittacula krameri*, 289.
Tail shorter than wing ; face yellow or red *Agapornis pullaria*, 290.
3. {
Tail red *Psittacus erithacus*, 286.
Tail not red *Poicephalus meyeri*, 288.

286. GREY PARROT.

Psittacus erithacus erithacus Linn.

Resident—savana IV—not common.

MOUNTED.

S.G.M. 1204, ♂, ?, (Mon.), 1913, Lady Wingate (A.L.B.).

287. NIAM-NIAM PARROT.

Poicephalus crassus (Sharpe).

Resident—savana IV—rare.

288. SUDAN BROWN PARROT.

Poicephalus meyeri meyeri (Cretzsch.)

Resident—savana—common.

MOUNTED.

S.G.M. 1201, ♂, 1202, ♀, El Ein Station (Kor.), Mar., 1914, A.L.B. (A.L.B.).

289a. SENEGAL PARAKEET.

Psittacula krameri krameri (Scop.)

Resident—savana (I, III and IV, arid), west (acacia forest)—common.

MOUNTED.

S.G.M. 1340, ♂, Mongalla (Mon.), Aug., 1914, A.L.B. (A.L.B.).

289b. ABYSSINIAN PARRAKEET.

Psittacula krameri parivirostris (Souan.)

Resident—savana II, and arid, east (acacia-forest)—common.

MOUNTED.

S.G.M. 1203, ♂, Lebeina, Dinder R. (Fung), Mar., 1913, A.L.B. (A.L.B.).

S.G.M. 2697, ♀, Khartoum (ex-cage-bird), Mar., 1924, A.E. Biggs (R.C.).

SKINS.

S.G.M. 2465, ♂, 2467, ♂, 3268, ♂?, Rahad R., near Medani (B.N.), Mar., 1924, W.W.B.

S.G.M. 2548, ♀, Um Debeia, Atbara R. (Ber.), July, 1924, W.W.B.

S.G.M. 2546, ♂, Atbara (Ber.), July, 1924, W.W.B.

S.G.M. 2550, ♂, 1765, ♂, Zeidab (Ber.), Aug. and Sep., 1924, W.W.B.

S.G.M. 2556, ♂, 2557, ♀, 2558, ♂, 2560, ♀, Kitiab (Ber.), Nov., 1924, W.W.B.

290. UGANDA RED-HEADED LOVEBIRD.

Agapornis pullaria ugandae Neum.

Resident—savana III and IV—fairly common.

MOUNTED.

S.G.M. 1482, ♂, 1429, ♀, Kajo Kaji (Mon.), Mar., 1915, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 204, ♀, 205, ♀, Yambio (B.G.), Mar., 1916, C.C.

*S.G.M. 206, ♂, Tembura (B.G.), Apr., 1916, C.C.

*S.G.M. 1766, ♂, 1767, ♀, Kajo Kaji (Mon.), Jan., 1917, J.H.M.

*S.G.M. 1768, ♂, Kajo Kaji (Mon.), Mar., 1917, J.H.M.

Order - - CORACIFORMES.

Sub-Order CORACIÆ.

Family CORACIIDÆ.

KEY TO SPECIES.

1. { Under parts cinnamon brown ... 2
 { Under parts pale blue ... 3

2. { Under parts uniformly washed with
 { lilac; forehead brown *Eurystomus afer*, 294.
 { Under parts streaked with white;
 { forehead and chin white *Coracias naevius*, 293.

3. { Breast washed with brown; tail-
 { feathers never elongated; wing over
 { 7 ins. *Coracias garrulus*, 291.
 { Breast clear, pale blue; outer tail-
 { feathers greatly elongated in adult;
 { wing under 7 ins. *Coracias abyssinicus*, 292.

291. EUROPEAN ROLLER.

Coracias garrulus garrulus Linn.

Spring and autumn passage migrant—common.

MOUNTED.

S.G.M. 1349, ♂, Khartoum, Oct., 1914, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 865, ♀, Korti (Don.), Oct., 1922, H.H.K.

*S.G.M. 211, ♀, 212, ♂, Khartoum, Sep., 1922, W.W.B.

S.G.M. 3272, ♂, Rahad River, near Medani (B.N.), Mar., 1924, W.W.B.

S.G.M. 2718, ♂, Erkowit (R.S.), Sep., 1924, W.W.B.

S.G.M. 2719, ♀, Sinkat (R.S.), Sep., 1924, W.W.B.

S.G.M. 2433, ♀, Wad Medani (B.N.), Aug., 1923, H.W.B.

292. ABYSSINIAN ROLLER.

Coracias abyssinicus abyssinicus Hermann.

Resident—throughout—common.

MOUNTED.

S.G.M. 1163, ♂, Shendi (Ber.), May, 1913, A.L.B. (A.L.B.).

S.G.M. 1350, ♀, Khartoum, Oct., 1914, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 1711, ♂, 1712, ♀, Ikoto (Mon.), Feb., 1918, J.H.R.Y.

*S.G.M. 207, ♂, 208, ♀, Meridi (B.G.), Jan. and Feb., 1916, C.C.

*S.G.M. 2354, ♀, Hosh (B.N.), Feb., 1923, W.W.B.

S.G.M. 2468, ♂, 2469, ♀, Rahad R., near Medani (B.N.), Mar., 1924, W.W.B.

S.G.M. 2714, ♀, Atbara (Ber.), July, 1924, W.W.B.

S.G.M. 2717, ♀, Kitab (Ber.), Nov., 1924, W.W.B.

S.G.M. 209, ♂, Zeidab (Ber.), Nov., 1921, W.E.G.

S.G.M. 3159, ♀, Talodi (N.M.), Dec., 1925, J.W.C.

293. RUFOUS-CROWNED ROLLER.

Coracias nævius nævius Daud.

Resident—savana III and IV—fairly common.

MOUNTED.

S.G.M. 1398, ♂, 1402, ♀, Kajo Kaji (Mon.), Mar., 1915, A.L.B. (A.L.B.).

SKINS.

S.G.M. 2937, ♀, Ogoro (Mon.), Feb., 1925, H.H.K.

294. NILE VALLEY BROAD-BILLED ROLLER.

Eurystomus afer aethiopicus Neum.

Resident—savana—not common.

MOUNTED.

S.G.M. 1165, ♂, Roseires (Fung), Apr., 1911, G. B. Middleton (A.L.B.).

SKINS.

†*S.G.M. 210, ♂, Mt. Baginzi (B.G.), Mar., 1916, C.C.

†—Bahr el Ghazal and Kordofan birds are intermediate *E. a. aethiopicus afer*.

Family *ALCEDINIDÆ*.

KEY TO SPECIES.

1. { Size large, wing over 7.0 ins. *Megaceryle maxima*, 296.
Smaller, wing under 6.0 ins. 2
2. { Plumage black and white, no metallic colour *Ceryle rudis*, 295.
Plumage not black and white, always with at least some metallic colouring 3
3. { Larger, wing over 2.5 ins. 4
Smaller, wing under 2.5 ins. 7
 4. { Bill entirely black *Alcedo atthis*, 297.
Bill with *lower mandible red*, upper either red or brownish black ... 5
 5. { Head uniformly grey, belly chestnut (in adult); size larger, wing over 3.5 ins. *Halcyon leucocephala*, 302.
Head streaked with blackish brown; under parts more or less streaked; size smaller, wing under 3.5 ins. ... *Halcyon chelicuti*, 303.
 6. { Smaller, wing under 4.4 ins. *Halcyon senegalensis*, 300.
Larger, wing over 4.4 ins. *Halcyon malimbicus*, 301.
 7. { Top of head crested *Corythornis cristata*, 298.
Top of head not crested *Ispidina picta*, 299.

295. PIED KINGFISHER.

Ceryle rudis rudis (Linn.)

Resident—rivers—abundant.

MOUNTED.

S.G.M. 1161, ♀, Khartoum, Dec., 1912, A.L.B. (A.L.B.).

SKINS.

S.G.M. 213, ♂, Zeidab (Ber.), June, 1921, W.E.G.

S.G.M. 2180, ♂, Khartoum, Sep., 1921, R.C.

S.G.M. 2405, ♂, 2436, ♀, Wad Medani (B.N.), Aug.-Nov., 1923, H.W.B.

S.G.M. 2898, ♂, 2899, ♀, Wad Medani (B.N.), June, 1924, W.W.B.

S.G.M. 2720, ♀, 2721, ♂, Atbara (Ber.), July, 1924, W.W.B.

296. GIANT KINGFISHER.

Megaceryle maxima maxima (Pall.)

Resident—rivers (south)—fairly common.

MOUNTED.

S.G.M. 1160, ♂, Galegu, Dinder River (Fung), Mar., 1913, A.L.B. (A.L.B.).

297. NORTH AFRICAN KINGFISHER.

Alcedo atthis atthis Linn.

Resident—coast and rivers (extreme north)—not common.

SKINS.

*S.G.M. 877, ♂, Letti (Don.), Dec., 1922, H.H.K.

298. MALACHITE KINGFISHER.

Corythornis cristata cristata (Pall.)

Resident—rivers and swamps (south)—common.

MOUNTED.

S.G.M. 1303, ♂, 1304, ♀, Mongalla, Aug., 1914, A.L.B. (A.L.B.).

299. PYGMY KINGFISHER.

Ispidina picta picta (Bodd.)

Resident—swamps and rivers (south)—common.

MOUNTED.

S.G.M. 1387, ♂, Lado Nyepo (Mon.), Feb., 1915, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 1730, ♀, 1731, ♀, Kajo Kaji (Mon.), Jan. and Feb., 1917, J.H.M.

*S.G.M. 217, ♀, 218, ♀, Meridi (B.G.), Jan. and Feb., 1916, C.C.

300a. SENEGAL RED-AND-BLACK-BILLED KINGFISHER.

Halcyon senegalensis senegalensis (Linn.)

Resident—savana—common.

MOUNTED.

†S.G.M. 1155, ♂, Khartoum, Dec., 1912, A.L.B. (A.L.B.).

SKINS.

†S.G.M. 1125, ♂, Ikoto (Mon.), Feb., 1918, J.H.R.Y.

†*S.G.M. 1722, ♀, Kajo Kaji (Mon.), Jan., 1917, J.H.M.

300b. SOUTH AFRICAN RED-AND-BLACK-BILLED KINGFISHER.

Halcyon senegalensis cyanoleucus (Vieill.)

Resident—savana—common.

MOUNTED.

S.G.M. 1154, ♂, Giggig (U.N.), "Summer," 1909, A.L.B. (A.L.B.).

301. UGANDA BLUE-BREASTED KINGFISHER.

Halcyon malimbicus prenticei Mearns.

Resident—savana—not common.

†—*H. s. cyanoleucus* intergrades with *H. s. senegalensis* in the Sudan. These birds are somewhat intermediate.

302. GREY-HEADED KINGFISHER.

Halcyon leucocephala leucocephala (Müll.)

Resident—savana and arid (acacia-forest)—common.

MOUNTED.

S.G.M. 1156, ♂, Tembura (B.G.), A.L.B. (A.L.B.).

SKINS.

*S.G.M. 216, ♂, Meridi (B.G.), Feb., 1916, C.C.

*S.G.M. 214, ♂, 215, ♀, Yei (Mon.), Nov. and Dec., 1915, C.C.

*S.G.M. 1723, ♀, 1724 ♀, Kajo Kaji (Mon.), Jan., 1917, J.H.M.

*S.G.M. 1725, ♂, Moruto (Mon.), Jan., 1918, J.H.R.Y.

*S.G.M. 2985, ♂, 2986, ♀, 2987, ♂, 2988, ♂, 2989, ♀, Rahad River, near Medani (B.N.), July, 1924, W.W.B.

*S.G.M. 2722, ♂, Atbara (Ber.), July, 1924, W.W.B.

303. STRIPED KINGFISHER.

Halcyon chelicuti chelicuti (Stanley)

Resident—savana—not common.

MOUNTED.

S.G.M. 1158, ♀, Meraffa, Dinder R. (Fung), Mar., 1913, A.L.B. (A.L.B.).

S.G.M. 1159, ♂, Jebel Ahmed Aga (U.N.), Feb., 1909, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 221, ♂, Mt. Baginzi (B.G.), Mar., 1916, C.C.

*S.G.M. 220, ♀, Yei (Mon.), Dec., 1915, C.C.

*S.G.M. 1727, ♀, Kajo Kaji (Mon.), Feb., 1917, J.H.M.

*S.G.M. 1728, ♀, 1729, ♂, Kajo Kaji (Mon.), Apr., 1917, J.H.M.

*S.G.M. 1726, ♀, Torit (Mon.), Sep., 1918, J.H.R.Y.

S.G.M. 3153, ♂, 3154, ♀, 3155, ♂, 3156, ♂, 3157, ♂, Talodi (N.M.), Dec., 1925, to Feb., 1926, J.W.C.

Family *MEROPIDÆ*.

KEY TO SPECIES.

1. {
 | A black, or blue, collar on lower throat,
 | separating throat from breast ... 2
 | No collar on lower throat 5
2. {
 | Throat yellow 3
 | Throat white *Aerops albocollis*, 308.
 | Throat green *Merops orientalis*, 306.
3. {
 | Tail forked *Dicrocercus hirundineus*, 311.
 | Tail not forked 4
4. {
 | Larger, wing over 4 ins. *Merops apiaster*, 304.
 | Smaller, wing under 4 ins. *Melittophagus pusillus*, 309.
5. {
 | Tail forked *Dicrocercus hirundineus*, juv., 311.
 | Tail not forked 6

6. { Under parts green ; throat yellow or brown 7
 { Under parts carmine red ; throat blackish blue *Merops nubicus*, 307.
 { Under parts pale brown ; throat red *Melittophagus bullocki*, 310.
7. { Throat brown ; cheeks blue *Merops persicus*, 305.
 { Throat yellow ; cheeks not blue ... *Merops apiaster*, 304.

304. EUROPEAN BEE-EATER.

Merops apiaster Linn.

Spring and autumn passage migrant—common.

MOUNTED.

S.G.M. 1145, ♂j, 1144, ♀, Khartoum, Oct., 1913, A.L.B. (A.L.B.).

SKINS.

S.G.M. 2728, ♀, Erkowit (R.S.), Sep., 1924, W.W.B.

S.G.M. 3234, ♂, 3235, ♀, Khor Hanoiteit, P. Sudan (R.S.), Apr., 1926, H.B.J.

305. BLUE-CHEEKED BEE-EATER.

Merops persicus persicus Pall.

Winter visitor [resident in north ?]—throughout—very common.

MOUNTED.

S.G.M. 1279, ♂, Khartoum, Apr., 1910, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 229, ♀, Yambio (B.G.), Mar., 1916, C.C.

*S.G.M. 2224, ♀, 2239, ♀, Wad Medani (B.N.), Sep., 1923, H.W.B.

S.G.M. 232, ♀, 233, ♂, 234, ♂, Zeidab (Ber.), May and June, 1921, W.E.G.

*S.G.M. 2731, o ?, 2732, ♀j, Zeidab (Ber.), Aug., 1924, W.W.B.

S.G.M. 2729, o ?, 2730, ♂, Erkowit (R.S.), Sep., 1924, W.W.B.

S.G.M. 3232, ♂, 3233, ♂, Khor Hanoiteit, P. Sudan (R.S.), Apr., 1926, H.B.J.

306a. LITTLE GREEN BEE-EATER.

Merops orientalis viridissimus Swains.

Resident—throughout—common.

MOUNTED.

S.G.M. 1151, ♂, Shendi (Ber.), May, 1913, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 241, ♀, Abu Dom (Don.), Oct., 1920, H.H.K.

*S.G.M. 243, ♂, 244, ♀, Tangassi Is. (Don.), Nov., 1921, H.H.K.

*S.G.M. 245, ♂, Zeidab (Ber.), June, 1921, W.E.G.

S.G.M. 2725, ♂, 2726, ♂, Atbara (Ber.), July, 1924, W.W.B.

S.G.M. 2727, ♂, Erkowit (R.S.), Aug., 1924, W.W.B.

S.G.M. 3160, ♂, 3161, ♀, Renk (U.N.), Nov., 1925, J.W.C.

306b. EGYPTIAN LITTLE BEE-EATER.

Merops orientalis cleopatra Nicoll.

Winter visitor—north—not common.

307. NUBIAN CARMINE BEE-EATER.

Merops nubicus nubicus Gmel.

Resident—savana and arid (acacia-grass)—abundant.

MOUNTED.

S.G.M. 1152, ♂, Tonj River (B.G.), Jan., 1908, A.L.B. (Sheals).

SKINS.

*S.G.M. 226, ♀, Meridi (B.G.), Jan., 1916, C.C.

*S.G.M. 228, ♀, Mt. Baginzi (B.G.), Mar., 1916, C.C.

*S.G.M. 1714, ♀, Kajo Kaji (Mon.), Jan., 1917, J.H.M.

*S.G.M. 1713, ♀, Makwar (B.N.), Nov., 1919, H.W.B.

*S.G.M. 2261, ♀, 2236, ♂, 2438, ♀, Wad Medani (B.N.), Aug., 1923, H.W.B.

*S.G.M. 2437, ♂, 2241, ♀, Wad Medani (B.N.), Nov., 1923, H.W.B.

S.G.M. 2900, ♂, 2901, ♀, Wad Medani (B.N.), June, 1924, W.W.B.

S.G.M. 2472, ♂, 2473, ♀, Rahad River, near Medani (B.N.), Mar., 1924, W.W.B.

308a. WHITE-THROATED BEE-EATER.

Aerops albicollis albicollis (Vieill.)

Resident—west—common.

SKINS.

†S.G.M. 237, ♂, El Obeid (Kor.), Aug., 1922, J.E.M.M.

308b. EASTERN WHITE-THROATED BEE-EATER.

Aerops albicollis major Parrot.

Resident—throughout, except west—common.

MOUNTED.

S.G.M. 1149, ♀, Khartoum, July, 1911, A.L.B. (Sheals).

S.G.M. 1150, ♂, Khartoum, July, 1913, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 235, ♀, 236, ♀, Yambio (B.G.), Mar., 1916, C.C.

S.G.M. 2902, ♂, 2903, ♂, Rahad R., near Medani (B.N.), June, 1924, W.W.B.

S.G.M. 2724, ♂, Shendi (Ber.), Aug., 1924, W.W.B.

S.G.M. 2723, ♂, Gendettu (Ber.), July, 1924, W.W.B.

†—A young bird of uncertain sub-species, *A. a. major*, is only doubtfully distinguishable.

309a. LITTLE BEE-EATER.

Melittophagus pusillus pusillus (Müll.)

Resident—west Darfur—common.

309b. WHITE NILE LITTLE BEE-EATER.

Melittophagus pusillus ocularis Reichw.

Resident—savana and arid (acacia-forest)—common.

MOUNTED.

S.G.M. 1146, ♂, 1147, ♂, Khartoum, Dec., 1912, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 248, ♂, 249, ♂, Yei (Mon.), Dec., 1915, C.C.

*S.G.M. 1715, ♀, 1716, ♀, Kajo Kaji (Mon.), Jan. and Feb., 1917, J.H.M.

*S.G.M. 2325, ♂, 2316, ♀, 2406, ♂, 2427, ♀, Wad Medani (B.N.), Sep. and Nov., 1923, H.W.B.

S.G.M. 250, ♀, 251, ♀, Khartoum, Sep., 1922, W.W.B.

S.G.M. 2474, ♂, 2476, ♀, Rahad R., near Medani (B.N.), Apr., 1924, W.W.B.

S.G.M. 3162, ♀, Talodi (N.M.), Jan., 1926, J.W.C.

310. SUDAN RED-THROATED BEE-EATER.

Melittophagus bullocki frenatus (Hartl.)

Resident—savana—common.

MOUNTED.

S.G.M. 1153, ♂, Rummâsh (Fung), Apr., 1913, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 238, ♂, 239, ♂, 240, ♂, Meridi (B.G.), Jan. and Feb., 1916, C.C.

*S.G.M. 1719, ♀, Kajo Kaji (Mon.), Apr., 1917, J.H.M.

S.G.M. 2943, ♀, 2944, ♀, 2945, ♂, Simsima (Mon.), Jan., 1925, H.H.K.

311. WHITE-NILE SWALLOW-TAILED BEE-EATER.

Dicrocercus hirurdineus heuglini Neum.

Resident—savana—not common.

MOUNTED.

S.G.M. 1372, ♂, 1373, ♀, Sheikh Tombe (Mon.), Feb., 1915, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 246, ♂, Yambio (B.G.), Mar., 1916, C.C.

*S.G.M. 247, ♂, Yei (Mon.), Nov., 1915, C.C.

*S.G.M. 1721, ♂, Rudu (Mon.), Mar., 1917, J.H.M.

Family BUCEROTIDÆ

KEY TO SPECIES.

1. { Size large, wing over 20 ins. ... *Bucorvus abyssinicus*, 315.
Size medium, wing 13-15 ins. ... *Bycanistes subcylindricus*, 312.
Size small, wing under 10 ins. ... 2

2. { Bill entirely red; throat white;
smaller, wing under 7.7 ins. ... *Lophoceros erythrorhynchus*, 314.
Bill not, or only partly, red; throat
brown; larger, wing over 7.7
ins. *Lophoceros nasutus*, 313.

312. BLACK-AND-WHITE CASQUED HORNBILL.

Bycanistes subcylindricus (Sel.)

Recorded in extreme south.

313a. GREY HORNBILL.

Lophoceros nasutus nasutus (Linn.)

Resident—savana—common.

SKINS.

*S.G.M. 771, ♂, Wau (B.G.), July-Aug., 1916, C.C.

†S.G.M. 3173, ♂, 3174, ♂, 3176, ♀, Talodi (N.M.), Dec., 1925, and Feb., 1926,
J.W.C.

‡S.G.M. 3175, ♀, Shakabo (N.M.), Nov., 1925, J.W.C.

313b. ARABIAN GREY HORNBILL.

Lophoceros nasutus forskalii (Ehrenb.)

Resident—arid (acacia-forest)—common.

MOUNTED.

‡S.G.M. 1197, ♀, 1198, ♂, Shendi (Ber.), May, 1913, A.L.B. (A.L.B.).

SKINS.

‡*S.G.M. 2574, ♂, 2575, ♂, 2576, ♀, 2577, ♂, 2578, ♀, 2579, ♂, 2580, ♂, Kitiab (Ber.),
Nov., 1924, W.W.B.

314. RED-BEAKED HORNBILL.

Lophoceros erythrorhynchus erythrorhynchus (Temm.)

Resident—savana and arid (acacia-forest)—abundant.

MOUNTED.

S.G.M. 1526, ♂, Torit (Mon.), 1918, J.H.R.Y. (R.C.).

SKINS.

*S.G.M. 1684, ♂, Rudu (Mon.), Feb., 1917, J.H.M.

*S.G.M. 1683, ♂, Abba Is. (W.N.), Aug., 1919, J.S.H.

*S.G.M. 2169, ♂, Sherkela (Kor.), Jan., 1923, R.G.A.

*S.G.M. 2420, ♂, 2421, ♂, Rahad River, near Medani (B.N.), Dec., 1923, W.W.B.

S.G.M. 2480, ♀, 2477, ♀, 3273, ♂, Rahad R., near Medani (B.N.), Jan-Apr., 1924,
W.W.B.

†—Intermediate *L. n. nasutus* > *forskali*.

‡—Intermediate *L. n. forskali* > *nasutus*.

315. ABYSSINIAN GROUND-HORNBILL.

Bucorvus abyssinicus (Bodd.)

Resident—savana—fairly common.

Family *UPUPIDÆ*.

316a. EUROPEAN HOOPOE.

Upupa epops epops Linn.

Spring and autumn passage migrant—common.

MOUNTED.

S.G.M. 1170, ♀, Khartoum, Dec., 1912, A.L.B. (A.L.B.).

SKINS.

S.G.M. 2620, ♂, 2621, ♀, Erkowit (R.S.), Aug., 1924, W.W.B.

S.G.M. 2625, ♀, 2626, ♂, Sinkat (R.S.), Sep., 1924, W.W.B.

S.G.M. 2628, ♀, 2632, ♂, Gendettu (Ber.), Oct., 1924, W.W.B.

S.G.M. 2629, ♀, 2630, ♂, Kitiaib (Ber.), Oct., 1924, W.W.B.

S.G.M. 3271, ♂, Wad Medani (B.N.), Jan., 1924, W.W.B.

316b. SOMALI HOOPOE.

Upupa epops somaliensis Salvin.

Resident—savana and arid (acacia-forest)—common.

SKINS.

S.G.M. 2627, ♀j, Zeidab (Ber.), Aug., 1924, W.W.B.

S.G.M. 2633, ♂, T.E., 2634, ♂, T.E., 2635, ♀, 2636, ♂, Kitiaib (Ber.), Nov., 1924, W.W.B.

Family *PHÆNICULIDÆ*.

KEY TO SPECIES.

1. { Bill strongly curved, yellow *Rhinopomastus minor*, 319.
 { Bill slightly curved, red or
 | black 2

2. { Larger, wing over 4.5 ins.; bill red
 | in adult *Phœniculus purpureus*, 317.
 | Smaller, wing under 4.5 ins.: bill black *Scoptelus aterrimus*, 318.

317. NILE KAKELAAR.

Phœniculus purpureus niloticus (Neum.)

Resident—savana—common.

MOUNTED.

S.G.M. 1171, ♂, Roseires (Fung), Sep., 1910, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 1707, ♀, 1708, ♂?, 1709, ♂, 1710, ♂, Kajo Kaji (Mon.), Jan., 1917, J.H.M.

*S.G.M. 222, ♀, Wau (B.G.), July-Aug., 1916, C.C.

S.G.M. 3169, ♂, 3170, ♀, 3171, ♂, 3172, ♂, Talodi (N.M.), Dec., 1925-Feb., 1926, J.W.C.

318. WHITE NILE WOOD-HOOPOE.

Scoptelus aterrimus enim Neum.

Resident—savana and arid (acacia-forest)—fairly common.

MOUNTED.

S.G.M. 1473, ♀, Kajo Kaji (Mon.), Mar., 1915, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 223, ♂, Wad Medani (B.N.), Aug., 1922, J.E.M.M.

*S.G.M. 224, ♂, Wad Medani (B.N.), Mar., 1922, H.W.B.

S.G.M. 3269, ♂, 3270, ♂, Rahad River, near Medani (B.N.), Jan. and Mar., 1924, W.W.B.

*S.G.M. 2344, ♀, 2353, ♀, Wad Medani (B.N.), Nov., 1923, W.W.B.

S.G.M. 3163, ♂, 3164, ♀, 3165, ♀, 3166, ♂, 3168, ♀, Talodi (N.M.), Dec., 1925–Feb., 1926, J.W.C.

319. WHITE NILE SCIMITAR-BILL.

Rhinopomastus minor cabanisi (Defil.)

Resident—savana—not common.

MOUNTED.

S.G.M. 1295, ♂, 1296, ♂, Mongalla, July, 1914, A.L.B. (A.L.B.).

SKINS.

S.G.M. 2941, ♂, Rejaf (Mon.), Jan., 1925, H.H.K.

Sub-Order STRIGES.

Family TYTONIDÆ.

320. AFRICAN BARN-OWL.

Tyto alba affinis (Blyth.)

Resident—throughout—common.

MOUNTED.

S.G.M. 118, ♀, Khartoum, July, 1913, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 889, ♂, Khartoum, Dec., 1922, J.N.C.

*S.G.M. 2904, ♂, Khartoum, Dec., 1924, P.H.C. Pakes.

Family STRIGIDÆ.

KEY TO SPECIES.

1. { Size large, wing over 8.0 ins.... ... 2
 { Size small, wing under 8.0 ins.... ... 6

2. { Facial disc well marked; ear tufts
 small and inconspicuous 3
 { Facial disc not well defined; ear tufts
 long 4

3. { Larger, wing over 11.5 ins. ... *Asio flammeus*, 321.
 Smaller, wing under 11.5 ins.... *Asio helvola*, 322.
4. { Larger, wing over 16.0 ins. ... *Bubo lacteus*, 330.
 Smaller, wing under 16.0 ins.... 5
5. { Feathering on thighs and tarsus barred *Bubo africanus*, 329.
 Feathering on thighs and tarsus not barred *Bubo ascalaphus*, 325.
6. { No ear tufts 7
 Ear tufts conspicuous 8
7. { Tail about two-thirds length of wing;
 size smaller, wing under 5.0
 ins. *Glaucidium perlatum*, 327.
 Tail about half the length of wing;
 size larger, wing over 5.0 ins. ... *Carine noctua*, 326.
8. { Larger, wing over 6.5 ins. *Otus leucotis*, 325.
 Smaller, wing under 6.5 ins. 9
9. { Larger, wing over 5.5 ins. *Otus scops*, 323.
 Smaller, wing under 5.5 ins. *Otus capensis*, 324.

321. SHORT-EARED OWL.

Asio flammeus flammeus (Pontopp.)

Winter visitor—arid—not common.

MOUNTED.

S.G.M. 1352, ♀, Fatasha (Kor.), Oct., 1914, A.L.B. (A.L.B.).

322. SOUTH AFRICAN MARSH-OWL.

Asio helvola helvola (Licht.)

Resident—swamps—common.

323a. EUROPEAN SCOPS-OWL.

Otus scops scops (Linn.)

Winter visitor—throughout—fairly common.

MOUNTED.

‡S.G.M. 1021, ♂, 1022, ♂, Khartoum, Oct., 1913, A.L.B. (A.L.B.).

323b. EASTERN SCOPS-OWL.

Otus scops pulchellus (Pall.)

Winter visitor—throughout—fairly common.

SKINS.

*S.G.M. 2859, ♀, Kitab (Ber.), Nov., 1924, W.W.B.

†*S.G.M. 202, ♀, Khandak (Don.), Nov., 1920, H.H.K.

† This bird more nearly matches the Indian form, *O. s. brucei* (Hume).

‡ Sub-species not determined.

324. CAPE SCOPS-OWL.

Otus capensis capensis (Smith.)

Resident—savana—common.

325. WHITE-FACED SCOPS-OWL.

Otus leucotis leucotis (Temm.)

Resident—savana and arid (acacia-forest)—fairly common.

MOUNTED.

S.G.M. 1020, ♀, Bahr el Zeraf (B.G.), June, 1909, A.L.B. (Sheals).

326. RED SEA LITTLE OWL.

Carine noctua spilogaster (Heugl.)

Resident—arid (Red Sea Province)—common.

MOUNTED.

S.G.M. 1019, ♂, Kamobsana (R.S.), Mar., 1912, A.L.B. (Sheals).

SKINS.

*S.G.M. 972, ♂, Suakin (R.S.), June, 1923, W.W.B.

327. PEARL-SPOTTED OWLET.

Glaucidium perlatum (Vieill.)

Resident—savana—very common.

SKINS.

*S.G.M. 1550, ♂, Ikoto (Mon.), Feb., 1918, J.H.R.Y.

S.G.M. 3191, ♂, 3192, ♂, Talodi (N.M.), Jan. and Feb., 1926, J.W.C.

328. DESERT PHARAOH EAGLE-OWL.

Bubo ascalaphus desertorum Erlanger.

Resident—arid (jebels)—fairly common.

329. ABYSSINIAN SPOTTED EAGLE-OWL.

Bubo africanus cinerascens Guér.

Resident—savana and Red Sea (hills and jebels)—common.

SKINS.

*S.G.M. 2860, ♂, Erkowit (R.S.), Aug., 1924, W.W.B.

*S.G.M. 2930, ♀, 2931, ♂, Rejaf (Mon.), Jan., 1925, H.H.K.

330. VERREAUX'S EAGLE-OWL.

Bubo lacteus (Temm.)

Resident—savana—fairly common.

SKINS.

*S.G.M. 2104, ♀, Ikoto (Mon.), Feb., 1918, J.H.R.Y.

Sub-Order CAPRIMULGI.

Family CAPRIMULGIDÆ.

KEY TO SPECIES.

1. { Tail graded, central feathers 1.2 ins.
or more, longer than the outer ones *Scotornis climacurus*, 342.
2. { Tail square or rounded, central
feathers never more than 1.0 ins.
longer than outer ones 2
3. { Outer tail-feathers tipped with white 3
Outer tail-feathers not tipped with
white 9
4. { Wing over 7.0 ins. 4
Wing under 7.0 ins. 6
5. { Plumage golden buff *Caprimulgus eximius*, ♂, 338.
Plumage grey or blackish brown ... 5
6. { Plumage streaked with black and
warm buff *Caprimulgus europaeus*, ♂, 331.
Plumage not streaked with black and
buff *Caprimulgus trimaculatus*, 334.
7. { Plumage golden brown *Caprimulgus nubicus*, 333.
Plumage greyish brown 7
8. { Upper parts with conspicuous black
streaks, spots or mottlings ... 8
Upper parts without conspicuous black
markings *Caprimulgus inornatus*, ♂, 335.
9. { A distinct rufous collar on hind neck ;
outer web of outer tail-feathers not
white *Caprimulgus ruficena*, ♂, 332.
No collar on hind neck ; outer web of
outer tail-feathers white *Caprimulgus natalensis*, ♂, 336.
10. { Wing over 7.0 ins. 10
Wing under 7.0 ins. 13
11. { A white, or buffish, bar across both
webs of outer primaries ; plumage
golden *Caprimulgus eximius*, ♀, 338.
White confined to inner edge of inner
webs of outer primaries ; plumage
sandy buff *Caprimulgus aegyptius*, 337.
12. { Top of head grey streaked with black *Caprimulgus europaeus*, ♀, 331.
Top of head dark brown, vermiculated
and mottled with pale rufous and
black ; ninth primary greatly elongated
in male *Cosmetornis vexillarius*, 341.
13. { A rufous collar on hind neck... ... 14
No collar on hind neck 15

14. { Wing under 6.3 ins.; ninth primary never elongated *Caprimulgus rufigena*, ♀, 332.
 Wing over 6.3 ins.; ninth primary, in male, greatly elongated, the shaft bare except at tip *Macrodipteryx longipennis*, 340.
15. { Upper parts with conspicuous triangular black streaks or spots ... *Caprimulgus natalensis*, ♀, 336.
 Upper parts grey with few and inconspicuous black markings ... *Caprimulgus inornatus*, ♀, 335.

331a. NORTH EUROPEAN NIGHTJAR.

Caprimulgus europaeus europaeus Linn.

Spring and autumn passage migrant—common.

MOUNTED.

S.G.M. 1108, ♀, Khartoum, Sep., 1913, A.L.B. (A.L.B.).

SKINS.

S.G.M. 2639, ♂, 2640, ♂, Sinkat (R.S.), Sep., and Oct., 1924, W.W.B.

331b. SOUTH EUROPEAN NIGHTJAR.

Caprimulgus europaeus meridionalis Hartert.

Spring and autumn passage migrant—not common.

SKINS.

S.G.M. 2638, ♂, Erkowit (R.S.), Sep., 1924, W.W.B.

331c. CENTRAL ASIAN NIGHTJAR.

Caprimulgus europaeus unwinii Hume.

Spring and autumn passage migrant—common.

SKINS.

*S.G.M. 216, ♂, Letti basin (Don.), Nov., 1920, H.H.K.

S.G.M. 2641, ♂, Gendettu (Ber.), Oct., 1924, W.W.B.

S.G.M. 2642, ♂, Kitiaib (Ber.), Nov., 1924, W.W.B.

332. RUFOUS-CHEEKED NIGHTJAR.

Caprimulgus rufigena (rufigena ?) Smith.

Summer visitor (?)—Darfur—fairly common.

333a. NUBIAN NIGHTJAR.

Caprimulgus nubicus nubicus Licht.

Resident—arid (scrub)—fairly common.

SKINS.

*S.G.M. 255, ♀, 256, ♀, Arab Hag (Don.), Nov., 1921, H.H.K.

*S.G.M. 257, ♂, 258, ♀, 259, ♂, Letti basin (Don.), Dec., 1921, H.H.K.

*S.G.M. 260, ♂, Ghaddar (Don.), Nov., 1920, H.H.K.

333b. DEAD SEA NIGHTJAR.

Caprimulgus nubicus tamaricis Tristr.

Resident—Red Sea coast (scrub)—fairly common.

334. ABYSSINIAN FRECKLED NIGHTJAR.

Caprimulgus trimaculatus trustigma Rüpp.

Resident—savana—fairly common.

MOUNTED.

S.G.M. 1488, ♀, Kajo Kaji (Mon.), Mar., 1915, A.L.B. (A.L.B.).

SKINS.

S.G.M. 2934, ♂, Rajaf (Mon.), Jan., 1925, H.H.K.

335. PLAIN NIGHTJAR.

Caprimulgus inornatus Heugl.

Resident—savana—very common.

MOUNTED.

S.G.M. 1399, ♂, 1414, ♀, Kajo Kaji (Mon.), Mar., 1915, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 1753, ♀, Kajo Kaji (Mon.), Feb., 1917, J.H.M.

336. CHAD WHITE-TAILED NIGHTJAR.

Caprimulgus natalensis chadensis Alex.

Resident—savana—fairly common.

MOUNTED.

S.G.M. 1510, ♂, Kajo Kaji (Mon.), Apr., 1915, A.L.B. (A.L.B.).

337a. EGYPTIAN NIGHTJAR.

Caprimulgus aegyptius aegyptius Licht.

Winter visitor—throughout—common.

MOUNTED.

S.G.M. 1113, ♂, 1114, ♂, Shendi (Ber.), May, 1913, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 2643, ♀, Gendetu (Ber.), Oct., 1924, W.W.B.

337b. SAHARAN NIGHTJAR.

Caprimulgus aegyptius saharæ Erl.

Wanderer—north—occasional.

338. GOLDEN NIGHTJAR.

Caprimulgus eximius eximius Temm.

Resident—arid (yellow gravel with open bush)—fairly common.

MOUNTED.

S.G.M. 1110, ♀, 1111, ♂, Shendi (Ber.), May, 1913, A.L.B. (A.L.B.).

339. HOUY'S NIGHTJAR.

Caprimulgus houyi Neum.

Summer visitor—Darfur—fairly common.

340. STANDARD-WING NIGHTJAR.

Macrodipteryx longipennis (Shaw.)

Resident—savana (rivers)—common.

MOUNTED.

S.G.M. 1416, ♀, 1421, ♂, Kajo Kaji (Mon.), Mar., 1915, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 1754, ♀, 1755, ♂, 1756, ♀, Kajo Kaji (Mon.), Mar. and Apr., 1917, J.H.M.

S.G.M. 2933, ♀, Rejaf (Mon.), Jan., 1925, H.H.K.

341. PENNANT-WING NIGHTJAR.

Cosmetornis vexillarius (Gould.)

Summer visitor (not breeding)—savana—fairly common.

MOUNTED.

S.G.M. 1292, ♂, Mongalla, Aug., 1914, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 2641, ♂, Wau (B.G.), Aug., 1916, C.C.

*S.G.M. 1750, ♀, 1751, ♀, 1752, ♂?, Kajo Kaji (Mon.), Mar.-Apr., 1917, J.H.M.

342. LONG-TAILED NIGHTJAR.

Scotornis climacurus (Vieill.)

Resident—savana and arid (acacia-forest)—very common.

MOUNTED.

S.G.M. 1112, ♂, Wad El Hag, Dinder R. (Fung), Mar., 1915, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 1757, ♂, Kajo Kaji (Mon.), Apr., 1917, J.H.M.

*S.G.M. 1758, ♂, Rudu (Mon.), Mar., 1917, J.H.M.

*S.G.M. 263, ♀, Ayod (Mon.), May, 1920, L.H.P.

S.G.M. 2932, ♀, Rejaf (Mon.), Jan., 1925, H.H.K.

*S.G.M. 253, ♀, 254, ♂, El Obeid (Kor.), Aug., 1921, J.E.M.M.

*S.G.M. 252, ♂, Zeidab (Ber.), June, 1921, W.E.G.

*S.G.M. 262, ♀, Zeidab (Ber.), Mar., 1921, H.W.B.

*S.G.M. 1759, ♂, 1760, ♀, 1761, ♀, 1762, ♀, Makwar (B.N.), Oct. and Nov., 1919, H.W.B.

S.G.M. 2905, ♂, Wad Medani (B.N.), June, 1924, W.W.B.

S.G.M. 2644, ♂, Gendettu (Ber.), Oct., 1924, W.W.B.

Sub-Order CYPSELI.

Family *MICROPODIDÆ*.

KEY TO SPECIES.†

1. { Larger, wing over 6.3. ins. 2
Smaller, wing under 6.3. ins.... ... 5
2. { Under parts white *Micropus melba*, 345.
Under parts not white 3
3. { Wing over 7.1 ins. *Micropus aequatorialis*, 346.
Wing under 7.1 ins. 4
 - Plumage brown with a strong bottle-green tinge; first primary shorter than second (not invariably) ... *Micropus apus*, 343.
 - Plumage brownish grey, with little or no gloss; first primary equal to, or longer than, second (occasionally shorter) *Micropus murinus*, 344.
5. { Tail deeply forked 6
Tail square *Micropus affinis*, 347.
6. { Wing over 5.5 ins., all four toes directed forwards at equal intervals 7
Wing under 5.5 ins., toes in pairs, the first and second pointing inwards, the third and fourth outwards ... *Tachynauta parvus*, 350.
7. { Difference in length between outer and middle tail-feathers 1.2 ins. or more *Micropus caffer*, 348.
Difference between outer and middle tail-feathers less than 0.8 ins. ... *Micropus horus*, 349.

343a. COMMON SWIFT.

Micropus apus apus (Linn.)

Spring and autumn passage migrant, some wintering in south, a few remaining in summer but not breeding—common.

SKINS.

*S.G.M. 1764, ♀, Kajo Kaji (Mon.), Apr., 1917, J.H.M.

S.G.M. 2822, ♂, Gendettu (Ber.), Aug., 1924, W.W.B.

343b. DALMATIAN SWIFT.

Micropus apus kollibayi (Tschusi).

Spring and autumn passage migrant, some wintering in south, a few remaining in summer but not breeding—common.

SKINS.

*S.G.M. 2199, ♂, 2200, ♀, Wad Medani (B.N.), Aug., 1923, H.W.B.

S.G.M. 2821, ♂, Erkowit (R.S.), Aug., 1924, W.W.B.

†—After Reichenow, Die Vogel Afrikas.

343c. EASTERN SWIFT.

Micropus apus pekinensis (Swinhoe).

Winter visitor (?)—throughout—occasional.

344. MADEIRAN MOUSE-COLOURED SWIFT.

Micropus murinus brehmorum (Hartert). (†)

Winter visitor, some remaining in summer but not breeding—west (throughout ?)—common.

345. WHITE-BELLIED OR ALPINE SWIFT.

Micropus melba melba (Linn.)

Spring and autumn passage migrant, some wintering, a few summering but not breeding—fairly common.

MOUNTED.

S.G.M. 1489, ♂, 1493, ♂, Kajo Kaji (Mon.), Mar. 1915, A.L.B. (A.L.B.).

346a. MOTTLED SWIFT.

Micropus aequatorialis aequatorialis (Müll.)

Roving visitor—throughout (?)—fairly common.

346b. DARFUR MOTTLED SWIFT.

Micropus aequatorialis furensis Lynes.

Resident—Darfur (Jebel Marra)—common.

347. LITTLE AFRICAN SWIFT.

Micropus affinis abyssinicus (Streubel).

Resident—savana (hills)—common.

348. ABYSSINIAN WHITE-RUMPED SWIFT.

Micropus caffer streubelii (Hartl.)

Resident—savana—not common.

MOUNTED.

S.G.M. 1516, ♂, Rejaf (Mon.), Apr., 1915, A.L.B. (A.L.B.).

349. HORUS SWIFT.

Micropus horus (Heugl.)

Resident—savana—not common.

† Birds from Darfur are nearest this form, but somewhat intermediate with the paler Egyptian form.

350. SUDAN PALM-SWIFT.

Tachynautes parvus parvus (Licht.)

Resident—throughout (only where there are doleib and dôm palm-trees)—very common.

SKINS.

- *S.G.M. 2160, ♀, Malek (Mon.), Mar., 1923, A.S.
- *S.G.M. 2206, ♀, 1763, ♀, Wad Medani (B.N.), Aug. and Sep., 1923, H.W.B.
- S.G.M. 265, ♂, Khartoum, Sep., 1922, W.W.B.
- S.G.M. 2823, ♀, 2824, ♂, Kitab (Ber.), Nov., 1924, W.W.B.
- *S.G.M. 2171, ♀, Letti (Don.), Dec., 1920, H.H.K.

Sub-Order COLII.

Family *COLIIDÆ*.

KEY TO SPECIES.

{ Nape blue	...	...	...	...	<i>Colius macrourus</i> , 352.
	Nape same colour as upper parts	...	<i>Colius striatus</i> , 351.		

351a. UELE SPECKLED MOUSEBIRD.

Colius striatus leucophthalmus Chapin.

Resident—savana IV—fairly common.

SKINS.

- *S.G.M. 266, ♀, Meridi (B.G.), Feb., 1916, C.C.

351b. UPPER NILE SPECKLED MOUSEBIRD.

Colius striatus erlangeri Zedl.

Resident—savana III—common.

SKINS.

- *S.G.M. 2098, ♂, Ionjlei (Mon.), July, 1919, J.S.H.
- *S.G.M. 2145, ♀, 2146, ♂, 2158, ♂, Malek (Mon.), Mar., 1923, A.S.
- S.G.M. 2938, ♀, Mongalla, Jan., 1925, H.H.K.
- S.G.M. 2939, ♀, 2940, ♂, Rejaf (Mon.), Jan., 1925, H.H.K.

351c. ABYSSINIAN SPECKLED MOUSEBIRD.

Colius striatus leucotis Rüpp.

Resident—savana II—common.

352a. BLUE-NAPED COLEY OR MOUSEBIRD.

Colius macrourus macrourus (Linn.)

Resident—throughout—common.

MOUNTED.

S.G.M. 1200, ♂, Khartoum, May, 1913, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 876, ♀, Letti (Don.), Dec., 1922, H.H.K.

*S.G.M. 2172, ♂, Khartoum, Dec., 1922, R.C.

S.G.M. 2825, ♂, Atbara (Ber.), July, 1924, W.W.B.

S.G.M. 2826, ♂, Um Debeia, Atbara River (Ber.), July, 1924, W.W.B.

S.G.M. 2829, ♂, 2830, ♀, Erkowit (R.S.), Sep., 1924, W.W.B.

S.G.M. 2399, ♂, 2400, ♀, Wad Medani (B.N.), Aug., 1923, H.W.B.

S.G.M. 3006, ♂, Sinkat (R.S.), July, 1925. H.B.J.

352b. UGANDA BLUE-NAPED COLEY OR MOUSEBIRD.

Colius macrourus pulcher Neum.

Resident—savana III—common.

SKINS.

*S.G.M. 2099, ♂, Torit (Mon.), Nov., 1917, J.H.R.Y.

Sub-Order TROGONES.

Family *TROGONIDÆ*.

353. NARINA TROGON.

Apaloderma narina narina (Steph.)

Resident—savana II & III—not common.

Sub-Order PICI.

Family *CAPITONIDÆ*.

KEY TO SPECIES.

1. {
 Size larger, wing over 2.5 ins.; fore-head not golden 2
 Size smaller, wing under 2.5 ins.; forehead bright golden *Pogoniulus chrysoconus*, 360.
2. {
 Upper parts without round white spots 3
 Upper parts with numerous, round, pearly-white spots 6
3. {
 Throat and breast black *Erythrobucco rolleti*, 354.
 Throat and breast red, or white, or black, streaked or spotted with red 4
 Throat and breast white 5
4. {
 Rest of under parts black *Lybius guifsobalito*, 355.
 Rest of under parts whitish *Lybius vieilloti*, 356.
 Rest of under parts red *Lybius bidentatus*, 358.

5. { Head white *Lybius leucocephalus*, 357.
 Head not white *Tricholæma diadematum*, 359.
6. { Throat and breast clear sulphur yellow,
 or with a single triangular black
 patch *Trachyphonus margaritatus*, 361.
 Throat and breast spotted with black *Trachyphonus darnaudii*, 362.

354. BLACK-BREASTED BARBET.

Erythrobucco rolleti (Defil.)

Resident—savana—common.

MOUNTED.

S.G.M. 1430, ♂, Kajo Kaji (Mon.), Mar., 1915, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 1732, ♂, 1733, ♀, Opari (Mon.), Feb., 1917, J.H.M.

*S.G.M. 1734, ♀, White Nile, near Kajo Kaji (Mon.), Feb., 1917, J.H.M.

*S.G.M. 179, ♂, 181, ♂, Wau (B.G.), July-Aug., 1916, C.C.

S.G.M. 2948, ♂, 2949, ♀, Rejaf (Mon.), Jan., 1925, H.H.K.

S.G.M. 3150, ♂, 3151, ♂, 3152, ♀, Talodi (N.M.), Jan.-Feb., 1925, J.W.C.

355. BLACK-BILLED BARBET.

Lybius guifsobalito Hermann.

Resident—savana—common.

MOUNTED.

S.G.M. 1191, ♂, 1192, ♀, Roseires (Fung), Apr., 1911, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 1736, ♀, 1737, ♂, Torit (Mon.), Nov., 1917, J.H.R.Y.

*S.G.M. 184, ♂, 185, ♂, Yei (Mon.), Nov., and Dec., 1915, C.C.

*S.G.M. 1735, ♂, near Kajo Kaji (Mon.), Feb., 1917, J.H.M.

S.G.M. 2946, ♂, 2947, ♂, Rejaf (Mon.), Jan., 1925, H.H.K.

356. VIEILLOT'S BARBET.

Lybius vieilloti vieilloti Leach.

Resident—savana, arid (acacia-forest)—common.

MOUNTED.

S.G.M. 1193, ♂, Jebelein (W.N.), May, 1909, A.L.B. (A.L.B.).

S.G.M. 1194, ♀, El Ein Station (Kor.), Mar., 1914, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 286, ♀, 287, ♂, Wau (B.G.), July-Aug., 1916, C.C.

S.G.M. 2394, ♂, 2481, ♂, 2482, ♀, 3267, ♀, Rahad River, near Medani (B.N.), Dec., 1923, Jan., Mar. and Apr., 1924, W.W.B.

S.G.M. 3146, ♀, 3147, ♀, 3148, ♂, 3149, ♂, Talodi (N.M.), Dec., 1925, and Jan., 1926, J.W.C.

357. WHITE-HEADED BARBET.

Lybius leucocephalus leucocephalus (Defil.)

Resident—savana III and IV—fairly common.

MOUNTED.

S.G.M. 1423, ♂, 1410, ♀, Kajo Kaji (Mon.), Mar., 1915, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 2100, ♀, 2101, ♂?, Kajo Kaji (Mon.), Jan., 1917, J.H.M.

†*S.G.M. 288, ♀, 289, ♀, Wau (B.G.), July-Aug., 1916, C.C.

‡*S.G.M. 290, ♂, Mt. Baginzi (B.G.), Mar., 1916, C.C.

358. UGANDA DOUBLE-TOOTHED BARBET.

Lybius bidentatus aequatorialis (Shelley).

Resident—savana IV—not common.

SKINS.

*S.G.M. 182, ♂, 183, ♀, Yambio (B.G.), Mar., 1916, C.C.

359. RED-FRONTED BARBET.

Tricholæma diadematum diadematum (Heugl.)

Resident—savana III—not common.

MOUNTED.

S.G.M. 1195, ♂, Sheikh Tombe (Mon.), May, 1909, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 2159, ♂, Malek (Mon.), Mar., 1923, A.S.

S.G.M. 2950, ♀, Rejaf (Mon.), Jan., 1925, H.H.K.

360a. LAKE CHAD YELLOW-FRONTED TINKER-BIRD.

Pogoniulus chrysoconus schubotzi (Reichw.)

Resident—savana I, III and IV—common.

MOUNTED.

S.G.M. 1511, ♂, Kajo Kaji (Mon.), Apr., 1915, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 2102, ♀, Opari (Mon.), Feb., 1917, J.H.M.

‡S.G.M. 3145, ♂, Talodi (N.M.), Dec., 1925, J.W.C.

†—White of breast extends further down on to the abdomen—c.f. Slater and M.-Praed, *Ibis*, 1919, p. 635.

‡—Intermediate *P. c. schubotzi* > *zedlitzi*.

360b. SENNAR YELLOW-FRONTED TINKER-BIRD.

Pogoniulus chrysoconus zedlitzi (Neum.)

Resident—savana II, and arid (acacia-forest)—common.

MOUNTED.

S.G.M. 1277, ♀, Roseires (Fung), July, 1910, A.L.B. (A.L.B.).

SKINS.

†S.G.M. 2484, ♂, 2486, ♀, Rahad River, near Medani (B.N.), Mar. and Apr., 1924,
W.W.B.

361. YELLOW-BREASTED BARBET.

Trachyphonus margaritatus margaritatus (Cretzsch.)

Resident—throughout—very common.

MOUNTED.

S.G.M. 1188, ♀, 1189, ♂, Blue Nile, June, 1913, A.L.B. (A.L.B.).

SKINS.

S.G.M. 292, ♀, 293, ♂, Zeidab (Ber.), June, 1921, W.E.G.

S.G.M. 2651, ♂, Zeidab (Ber.), Aug., 1924, W.W.B.

S.G.M. 2646, ♀, Um Debia, Atbara River (Ber.), July, 1924, W.W.B.

S.G.M. 2647, ♂ br., 2648, ♂ nestl., 2649, ♀ nestl., 2650, ♀ nestl., Shendi (Ber.), Aug., 1924, W.W.B.

S.G.M. 2654, ♀, Erkowit (R.S.), Aug., 1924, W.W.B.

S.G.M. 294, ♂, Khartoum, July, 1922, W.W.B.

S.G.M. 3266, ♀, Rahad River, near Medani (B.N.), Jan.-Feb., 1924, W.W.B.

362. D'ARNAUD'S BARBET.

Trachyphonus darnaudii darnaudii (Prév. and Des Murs.)

Resident—savana III—not common.

MOUNTED.

S.G.M. 1542, ♀, Torit (Mon.), Nov., 1917, J.H.R.Y. (R.C.).

SKINS.

S.G.M. 2950, ♀, Rejaf (Mon.), Jan., 1925, H.H.K.

*S.G.M. 1738, ♂, Mongalla, Aug., 1919, J.S.H.

Family INDICATORIDÆ.

KEY TO SPECIES.‡

1. { Tail of ten feathers; bill broader than deep *Prodotiscus regulus*, 366.
 { Tail of twelve feathers; bill deeper than broad 2
2. { Middle of upper tail-coverts white or partly white *Indicator indicator*, 363.
 { No white in upper tail-coverts 3
3. { Wing under 3.2 ins. *Indicator exilis*, 365.
 { Wing over 3.2 ins. *Indicator minor*, 364.

†—These two birds, as well as the specimen from Talodi, are more or less intermediate, with pale yellow mantles. The two races appear to fuse in the region of the White Nile Valley.

‡—After Reichenow, Die Vogel Afrikas.

363. BLACK-THROATED HONEY-GUIDE.

Indicator indicator (Sparrm.)

Resident—savana—fairly common.

MOUNTED.

S.G.M. 1520, ♂, Rejaf (Mon.), Apr., 1915, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 177, ♂, 178, ♀, Yei (Mon.), Dec., 1915, C.C.

364a. ABYSSINIAN LESSER HONEY-GUIDE.

Indicator minor diadematus Rupp.

Resident—savana II and III—not common.

364b. ADAMAWA LESSER HONEY-GUIDE.

Indicator minor riggenbachi Zedl.

Resident—savana I—not common.

365. UGANDA LEAST HONEY-GUIDE.

Indicator exilis pygmaeus Reichw.

Resident—savana IV—not common.

366. WAHLBERG'S HONEY-GUIDE.

Prodotiscus regulus regulus Sund.

Resident—savana II—fairly common.

Family PICIDÆ.

KEY TO SPECIES.

1. {

Tail-feathers with their shafts stiffened and spiny at the tip	...	...	2
Tail-feathers soft and rounded at the tip	...	...	10
2. {

Size larger, wing over 4.0 ins.	...	3
Size smaller, wing under 4.0 ins.	...	7
3. {

Under parts spotted or streaked with black	...	...	4
Under parts not spotted or streaked with black	...	...	6
4. {

Upper parts dusky or yellowish olive spotted and barred with white or yellowish	...	...	5
Upper parts yellowish olive spotted, but not barred with white or yellowish	...	...	<i>Campethera punctuligera</i> , 368.
5. {

Under parts spotted with black	...	<i>Campethera nubica</i> , 367.
Under parts streaked with black	...	<i>Campethera abingoni</i> , 369.

6. { Shafts of tail-feathers dark brown or
black above *Mesopicos goertae*, 375.
Shafts of tail-feathers bright yellow
above *Thripias namaquus*, 374.
7. { Upper parts uniform or only faintly
barred 8
Upper parts distinctly barred *Dendropicos elachus*, 371.
8. { Upper parts yellowish olive 9
Upper parts dull brown *Yungipicus obsoletus*, 373.
9. { Breast spotted *Dendropicos pacilolæmus*, 372.
Breast streaked *Dendropicos lafresnayi*, 370.
10. { Throat and breast yellowish buff,
narrowly barred with black *Jynx torquilla*, 376.
Upper throat banded black and white,
lower throat and breast rufous
brown *Jynx pulchricollis*, 377.

367. NUBIAN WOODPECKER.

Campethera nubica nubica (Bodd.)

Resident—savana and arid (acacia-forest)—common.

MOUNTED.

S.G.M. 1319, ♂, 1320, ♂, Mongalla, Sep., 1914, A.L.B. (A.L.B.).

S.G.M. 1543, ♀, Torit (Mon.), Aug., 1918, J.H.R.Y. (R.C.).

SKINS.

S.G.M. 2713, ♀, Um Debia, Atbara River (Ber.), July, 1924, W.W.B.

S.G.M. 2415, ♂, 3265, ♀, Rahad River, near Medani (B.N.), Dec., 1923, and Jan., 1924, W.W.B.

S.G.M. 2486, ♀, 2487, ♂, 2488, ♂, Rahad River, near Medani (B.N.), Mar. and Apr., 1924, W.W.B.

S.G.M. 3141, ♂, 3142, ♂, 3143, ♀, 3144, ♂, Talodi (N.M.), Dec., 1925, J.W.C.

368. GHAZAL FINE-SPOTTED WOODPECKER.

Campethera punctuligera balia (Heugl.)

Resident—savana I and IV—fairly common.

369. WEST AFRICAN GOLDEN-TAILED WOODPECKER.

Campethera abingoni chrysurus (Swains.)

Resident—savana IV—not common.

370. ABYSSINIAN GREEN-BACKED CARDINAL WOODPECKER.

Dendropicos lafresnayi lepidus (Cab. and Heine).

Resident—savana III and IV—fairly common.

MOUNTED.

S.G.M. 1381, ♂, Khor Kaia (Mon.), Feb., 1915, A.L.B. (A.L.B.).

371. LITTLE GREY WOODPECKER.

Dendropicos elachus Oberh.

Resident—arid, west (acacia-forest)—not common.

372. UGANDA SPOTTED WOODPECKER.

Dendropicos pœcilocæmus Reichw.

Resident—savana III and IV—not common.

SKINS.

*S.G.M. 295, ♀, 296, ♂, Meridi (B.G.), Jan. and Feb., 1916, C.C.

373a. BROWN-BACKED WOODPECKER.

Yungipicus obsoletus obsoletus (Wagl.)

Resident—savana and arid (acacia-forest)—common.

MOUNTED.

S.G.M. 1406, ♀, Kajo Kaji (Mon.), Mar., 1915, A.L.B. (A.L.B.).

SKINS.

S.G.M. 2489, ♀, Rahad River, near Medani (B.N.), Jan., 1924, W.W.B.

S.G.M. 3140, ♂, Talodi (N.M.), Dec., 1925, J.W.C.

373b. RED SEA BROWN-BACKED WOODPECKER.

Yungipicus obsoletus heuglini Neum.

Resident—Red Sea Province (acacia-forest)—not common.

374. ABYSSINIAN BEARDED WOODPECKER.

Thripias namaquus schoensis (Rüpp.)

Resident—savana IV—not common.

375a. WEST AFRICAN GREY WOODPECKER.

Mesopicos goertae poicephalus (Swains.)

Resident—savana I, III and IV—very common.

MOUNTED.

S.G.M. 1321, ♂, 1322, ♀, Mongalla, July, 1914, A.L.B. (A.L.B.).

SKINS.

*S.G.M. 299, ♂, Wau (B.G.), July-Aug., 1916, C.C.

*S.G.M. 298, ♀, Yei (Mon.), Dec., 1915, C.C.

*S.G.M. 1651, ♂, Kajo Kaji (Mon.), Mar., 1917, J.H.M.

S.G.M. 1652, ♂, Opari (Mon.), Feb., 1917, J.H.M.

S.G.M. 1653, ♂, Torit (Mon.), Aug., 1918, J.H.R.Y.

375b. BERBER GREY WOODPECKER.

Meropicos goertae koenigi Neum.

Resident—arid (acacia-forest)—common.

SKINS.

- S.G.M. 2709, ♀, 2710, ♂, Gendettu (Ber.), Aug. and Oct., 1924, W.W.B.
S.G.M. 2711, ♂, 2712, ♀, Kitiab (Ber.), Oct. and Nov., 1924, W.W.B.
S.G.M. 2708, ♂, Um Debia, Atbara River (Ber.), July, 1924, W.W.B.
S.G.M. 300, ♀, Zeidab (Ber.), Mar., 1921, H.W.B.
S.G.M. 2249, ♀, Wad Medani (B.N.), Sep., 1923, H.W.B.
S.G.M. 2419, ♂, Rahad River, near Medani (B.N.), Dec., 1923, W.W.B.

375c. SENNAR GREY WOODPECKER.

Mesopicos goertae abessinicus Reichw.

Resident—savana II—common.

376. EUROPEAN WRYNECK.

Jynx torquilla torquilla Linn.

Winter visitor—throughout—fairly common.

MOUNTED.

- S.G.M. 1186, ♂, 1187, ♂, Khartoum, Sep., 1913, A.L.B. (A.L.B.).

SKINS.

- *S.G.M. 297, ♂, Yei (Mon.), Nov., 1915, C.C.
S.G.M. 2707, ♂, Sinkat (R.S.), Oct., 1924, W.W.B.
S.G.M. 3201, ♂, Khartoum, Oct., 1925, H.H.K.
S.G.M. 3238, ♀, Khor Hanoiteit, P. Sudan (R.S.), Apr., 1926, H.B.J.

377. BANDED-THROATED WRYNECK. *

Jynx pulchricollis Hartl.

Only known from types—Mongalla Province.

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