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.

SUDAN GOVERNMENT MUSEUM (NATURAL HISTORY)

PUBLICATION No. 1.

MAY 1926.

PRICE - - - P.T. 20 (4/-).
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.

SUDAN GOVERNMENT MUSEUM (NATURAL HISTORY)
PUBLICATION No. 1.

MAY 1926.

PRICE - - - P.T. 20 (4/-).

PRINTED BY
McCORQUODALE & CO. LTD.
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 purposes 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.
- ♀ = female.
- ? = sex not known.
- j = juvenile.
- nestl. = nestling.
- T.E. or O.E. = testes or ovaries enlarged.
- T.S.E. or O.S.E. = testes or ovaries slightly enlarged.

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. Whitfield.
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. Ruttledeg.
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.
SYSTEMATIC INDEX.

Order RATITÆ ... ... ... ... ... ... ... ... 17
  Family STRUTHIONIDÆ (Ostrich) ... ... ... ... ... 17

Order COLUMBIIFORMES ... ... ... ... ... ... ... ... 17
  Sub-Order PODICIPIDES ... ... ... ... ... ... 17
    Family PODICIPIDÆ (Grebes) ... ... ... ... ... 17

Order CICONIIDÆ ... ... ... ... ... ... ... ... ... 18
  Sub-Order STEGANOPODES ... ... ... ... ... ... ... ... 18
    Family PHAËTHONTIDÆ (Tropic-birds) ... ... ... ... ... 18
    Family SULIDÆ (Booby) ... ... ... ... ... ... ... ... 18
    Family PHALACROCOCRACIDÆ (Cormorants) ... ... ... ... ... 18
    Family ANHINGIDÆ (Darters) ... ... ... ... ... ... ... 18
    Family PELECANIDÆ (Pelicans) ... ... ... ... ... ... 18
  Sub-Order ARDEIDÆ ... ... ... ... ... ... ... ... ... 19
    Family ARDEIDÆ (Heron) ... ... ... ... ... ... ... ... 19
    Family SCOPIDÆ (Hammerhead) ... ... ... ... ... ... ... 23
    Family BALENICIPITIDÆ (Shoebill) ... ... ... ... ... ... 23
  Sub-Order CICONIÆ ... ... ... ... ... ... ... ... ... 24
    Family CICONIIDÆ (Storks) ... ... ... ... ... ... ... ... 24
    Family PLEGADIDÆ (Ibises) ... ... ... ... ... ... ... ... 25
  Sub-Order PHÆNICOPTERI ... ... ... ... ... ... ... ... ... 27
    Family PHÆNICOPTERIDÆ (Flamingos) ... ... ... ... ... ... 27

Order ANSERIFORMES ... ... ... ... ... ... ... ... ... 27
  Sub-Order ANSERES ... ... ... ... ... ... ... ... ... 27
    Family ANATIDÆ (Ducks) ... ... ... ... ... ... ... ... ... 27

Order FALCONIFORMES ... ... ... ... ... ... ... ... ... 33
  Sub-Order ACCIPITRES ... ... ... ... ... ... ... ... ... 33
    Family SAGITTARIIDÆ (Secretary-bird) ... ... ... ... ... ... 33
    Family ÆGYPIDÆ (Vultures) ... ... ... ... ... ... ... ... ... 33
    Family FALCONIDÆ (Birds of Prey) ... ... ... ... ... ... ... 34
    Family PANDIONIDÆ (Osprey) ... ... ... ... ... ... ... ... 47

Order GALLIFORMES ... ... ... ... ... ... ... ... ... 48
  Sub-Order TURNICES ... ... ... ... ... ... ... ... ... 48
    Family TURNICIDÆ (Button-Quails) ... ... ... ... ... ... 48
  Sub-Order GALLI ... ... ... ... ... ... ... ... ... 48
    Family PHASIANIDÆ (Game-birds) ... ... ... ... ... ... 48
Order **GRUIFORMES**...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  52
Family **RALLIDÆ** (Rails) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  52
Family **JACANIDÆ** (Jacanas) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  54
Family **BALEARICIDÆ** (Cranes) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  54
Family **OTIDIDÆ** (Bustards) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  55
Order **CHARADRIIFORMES** ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  57
Sub-Order **LIMICOLÆ** ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  57
  Family **CHARADRIDÆ** (Plovers) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  57
  Family **RECURVIROSTRIDÆ** (Avocet) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  61
  Family **SCOLOPACIDÆ** (Sandpipers) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  62
  Family **GLAREOLIDÆ** (Pratincoles) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  68
  Family **DROMADIDÆ** (Crab-Plover) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  70
  Family **BURHINIDÆ** (Stone-Curlews) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  70
Sub-Order **LARI** ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  71
  Family **LARIDÆ** (Gulls and Terns) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  71
Sub-Order **PTEROCLIDÆ** ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  77
  Family **PTEROCLIDIDÆ** (Sandgrouse) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  77
Sub-Order **COLUMBÆ** ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  79
  Family **COLUMBIDÆ** (Pigeons) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  79
Order **CUCULIFORMES** ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  84
Sub-Order **CUCULI** ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  84
  Family **CUCULIDÆ** (Cuckoos) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  84
  Family **MUSOPHAGIDÆ** (Plantain Eaters) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  88
Sub-Order **PSITTACI** ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  90
  Family **PSITTACIDÆ** (Parrots) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  90
Order **CORACIFORMES** ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  91
Sub-Order **CORACIÆ** ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  91
  Family **CORACHIDÆ** (Rollers) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  91
  Family **ALCEDINIDÆ** (Kingfishers) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  93
  Family **MEROPIDÆ** (Bee-Eaters) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  95
  Family **BUCEOVIDÆ** (Hornbills) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  99
  Family **UPUPIDÆ** (Hoopoes) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  100
  Family **PHENICULIDÆ** (Wood-Hoopoes) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  100
Sub-Order **STRIGES** ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  101
  Family **TYTONIDÆ** (Barn-Owls) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  101
  Family **STRIGIDÆ** (Owls) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  101
Sub-Order **CAPRIMULGI** ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  104
  Family **CAPRIMULGIDÆ** (Nightjars) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  104
Sub-Order **CYPSELI** ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  108
  Family **MICROPOLIDÆ** (Swifts) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  108
Sub-Order **COLIÆ** ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  110
  Family **COLIIDÆ** (Mousebirds) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  110
Sub-Order **TROGONES** ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  111
  Family **TROGONIDÆ** (Trogons) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  111
Sub-Order **PICÆ** ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  111
  Family **CAPITONIDÆ** (Barbets) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  111
  Family **INDICATORIDÆ** (Honey-Guides) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  114
  Family **PICIDÆ** (Woodpeckers) ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  ...  115
PLATE I.

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

IRIS
LORES
FOREHEAD
CEREBRO
NOSTRIL
UPPER
MANDIBLE
LOWER
MANDIBLE
"SHOULDER" OR BEND OF WING
CROWN
NAVE HIND-NECK
SIDE OF NECK
EAR
COVERTS
CULMEN
CHIN BRISTLES
RICTAL BRISTLES
LESSER WING-COVERTS
SCAPULARS
MEDIAN WING-COVERTS
GREATER WING-COVERTS
EMARGINATION
ABDOMEN
OR BELLY
SHAFT
TIBIA
TARSUS
(FOOT)
MIDDLE TOE
OUTER TOE
CLAW
HIND TOE
CLAW
OUTER TAIL-FEATHER
UNDER TAIL-COVERTS
UPPER TAIL-COVERTS
RUMP
SECONDARYS
PRIMARIES
TAIL-FEATHERS

W.W.B.
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 ... ... ... ... ... Glaucidae (part), p. 68.
   Toes not webbed ... ... ... ... ... Scolopacidae (part), p. 62.

   With no swelling at tip of bill ... ... ... ... ... 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.

7. All four toes turned forward and completely webbed ... ... ... ... ... 9
   All four toes with lateral lobe-like expansions ... ... ... ... ... Podicipedidae, p. 17.

8. 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 Sclater, Birds of South Africa.
<p>| 13 | Hind-toe raised at joint above the level of other toes ... ... ... 14 |
| 13 | Hind-toe jointed at same level as other toes ... ... ... ... 26 |
| 14 | Lower portion of shanks (tibia) |
| 14 | clothed with feathers ... ... ... 15 |
| 14 | Lower portion of shanks naked ... ... ... 16 |
| 15 | Feet feathered to base of toes ... ... ... ... Pteroclididae, p. 77. |
| 15 | Feet not feathered as far as toes ... ... Phasianidae, p. 48. |
| 16 | Toes very long, middle one longer than tarsus ... ... ... Hallidae, p. 52. |
| 16 | Middle toe hardly ever equal to tarsus ... ... ... ... 17 |
| 17 | Size large (over 39 ins. in length) ... ... Balaeicidae, p. 54. |
| 17 | Size moderate (under 24 ins. in length) ... ... ... 18 |
| 18 | Tarsus covered in front by transverse scutes ... ... ... ... 19 |
| 18 | Tarsus covered in front by hexagonal scales ... ... ... ... 25 |
| 19 | Tarsus covered behind by transverse scutes ... ... ... ... 20 |
| 19 | Tarsus covered behind by reticulate scales ... ... ... ... 24 |
| 20 | Anterior toes partly webbed ... ... ... 21 |
| 20 | Anterior toes not webbed ... ... ... 23 |
| 21 | Bill stout and strong ... ... ... ... Scolopacidae (part), p. 62. |
| 22 | Bill longer than head ... ... ... ... Dromadidae, p. 70. |
| 22 | Bill about half length of head ... ... ... ... Glareolidae (part), p. 68. |
| 23 | Toes greatly longer than tarsus ... ... ... Jacanidae, p. 54. |
| 23 | Toes never longer than tarsus ... ... ... Scolopacidae (part), p. 62. |
| 24 | Bill about as long as head ... ... ... ... Charadriidae (part), p. 57. |
| 24 | Bill greatly longer than head ... ... ... ... Scolopacidae (part), p. 62. |
| 25 | Bill more than twice the length of middle toe and claw ... ... ... ... Recurvirostridae (part), p. 61. |
| 25 | Bill about as long as middle toe and claw ... ... ... ... Charadriidae (part), p. 57. |
| 26 | Lower portion of shanks (tibia) naked ... 27 |
| 26 | Whole of shanks, and often of tarsus, feathered ... ... ... ... 30 |
| 27 | Bill long and curved throughout, or flattened and spatulate at tip ... ... Plegadidae, p. 25. |
| 27 | Bill large, broad and deep, with a distinct hooked &quot;nail&quot; at tip ... ... Balanicipitidae, p. 23. |
| 27 | Bill long and straight, the tip only sometimes slightly decurved ... ... ... 28 |
| 28 | A distinct basal web between all three anterior toes ... ... ... ... 29 |
| 28 | A basal web between middle and outer toes only ... ... ... ... Ardeidae, p. 19. |
| 29 | Nape crested ... ... ... ... Scopidae, p. 23. |
| 29 | Nape not crested ... ... ... ... Ciconiidae, 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 ... | Columbidae, 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 ... ... ... ... | Aegypsiidae, p. 33. |
|     | Crown feathered ... ... ... ... | Falconidae, p. 34. |
| 35. | Tarsus bare; eyes not directed forwards; no facial disc ... ... ... | Pandionidae, 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) ... ... ... | Tytonidae, p. 101. |
|     | Claw of middle toe not pectinated ... ... ... | Strigidae, p. 101. |
| 37. | Feet with two toes forwardly and two backwardly directed ... ... | 38 |
|     | Feet with all four toes directed forwards ... ... ... ... | 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 ... ... ... | Indicatoridae (part), p. 114. |
|     | Wing with nine primaries ... ... ... | 40 |
| 40. | With well developed bristles at base of bill and on chin ... ... ... | Capitonidae, p. 111. |
|     | No conspicuous bristles at base of bill or on chin ... ... ... | Cuculidae, p. 84. |
| 41. | Tail longer than wing ... ... ... | Trogonidae, p. 111. |
|     | Tail shorter than wing ... ... ... | 42 |
| 42. | Wing with nine primaries; first nearly as long as others ... ... | Indicatoridae (part), p. 114. |
|     | Wing with ten primaries; first short, about half-length of wing ... ... | Picidae, p. 115. |
|     | Bill very small, but wide at gape; secondaries very short and less than nine in number ... ... | Micropodidae, p. 108. |
| 43. | Bill short and finch-like; secondaries medium and more than nine in number ... ... ... | Coliidae, p. 110. |
|     | Mouth very large; bill small and weak Caprimulgidae, p. 104. |
|     | Mouth not large; bill stronger ... ... | 45 |</p>
<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>45.</td>
<td>Third and fourth toes united along their basal joint, at least</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Third and fourth toes quite free from one another</td>
<td>51</td>
</tr>
<tr>
<td>46.</td>
<td>Sides of tarsus covered with two entire longitudinal plates which meet in a ridge behind</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tarsus with no entire lateral plates</td>
<td>47</td>
</tr>
<tr>
<td>47.</td>
<td>Tail with ten feathers</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Tail with twelve feathers</td>
<td>50</td>
</tr>
<tr>
<td>48.</td>
<td>Bill large and stout</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>Bill long and slender</td>
<td></td>
</tr>
<tr>
<td>49.</td>
<td>Head crested</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Head not crested</td>
<td></td>
</tr>
<tr>
<td>50.</td>
<td>Bill slender and curved; ten primaries</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Bill stout and straight; eleven primarises</td>
<td></td>
</tr>
<tr>
<td>51.</td>
<td>Sides of tarsus covered by two entire longitudinal plates which meet in a ridge behind</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Tarsus without entire lateral plates</td>
<td></td>
</tr>
<tr>
<td>52.</td>
<td>Fourth toe reversible at will</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Fourth toe not reversible</td>
<td></td>
</tr>
<tr>
<td>53.</td>
<td>Tail with twelve feathers</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Tail with ten feathers</td>
<td></td>
</tr>
</tbody>
</table>
Order - - **RATITÆ.**

Family **STRUTHIONIDÆ.**

1. **NORTH AFRICAN OSTRICH.**

*Struthio camelus camelus* Linn.

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

Order - - **COLYMBIFORMES.**

Sub-Order **PODICIPIDES.**

Family **PODICIPIDÆ.**

**KEY TO SPECIES.**†

\[
\begin{align*}
\text{Length about 12 ins. (wing about 5.5} & \text{ ins.), a crest on crown of head and} \\
\text{a bunch of elongated hair-like} & \text{ plumes behind eye in breeding plumage} \\
\text{age} & \text{ ... ... ...} \\
\text{Length about 10 ins. (wing about 4.10} & \text{ ins.) ; no crest} \\
\text{age} & \text{ ... ... ...} \\
\end{align*}
\]

- *Poliocephalus ruficollis*; 3.

2. **AFRICAN BLACK-NECKED GREBE.**

*Proctopus nigricollis gurneyi* Roberts.

Wanderer (?)—rare.

**MOUNTED.**


3. **AFRICAN LITTLE GREBE.**

*Poliocephalus ruficollis capensis* (Salvad.)

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

**MOUNTED.**


**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 Selater, *Birds of South Africa.*
Order - - CICONIIFORMES.
Sub-Order STEGANOPODES.

Family PHAÈTHONIDÆ.

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 ... Phalacrocorax carbo, 6.
   Length about 22 ins., breast blackish ... Phalacrocorax africanus, 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.

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, 3, Zeidab (Ber.), Sep., 1919, H.W.B.

Family PELECANIDÆ.

   KEY TO SPECIES.
   \[ \text{Feathers of forehead terminating in a} \]
   \[ \text{forwardly directed point; shafts of} \]
   \[ \text{primaries white} \] \[ \ldots \] \[ \ldots \] \[ \ldots \] \[ 2 \]

1. \[ \text{Feathers of forehead terminating in a} \]
   \[ \text{concave line at base of bill; shafts} \]
   \[ \text{of primaries horn-brown, white only} \] \[ \text{at bases} \] \[ \ldots \] \[ \ldots \] \[ \ldots \] \[ Pelecanus rufescens, 11. \]

\[ \begin{align*}
\text{Size large, wing over 27 ins.} & \quad \ldots \quad Pelecanus onocrotalus, 9. \\
\text{Size smaller, wing under 27 ins.} & \quad \ldots \quad Pelecanus roseus, 10.
\end{align*} \]
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 melanocephala, 13.

6. 
   - Wing over 9.5 ins. ... ... ... 7
   - Wing under 9.5 ins. ... ... ... 11

7. 
   - Entire plumage slaty-black, or with throat a reddish wine-colour ... *Melanophoix ardesiaca*, 13.
   - 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 ... ... ... Ardea 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 melanoccephala Vig. and Childr.
   Resident—rivers—common.

   MOUNTED.

   SKINS.
   *S.G.M. 2125, ♂, 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. 2985, ♂, 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 intermedius 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.
   §§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.**

**Skins.**
*S.G.M. 141, ć, 142, ć, Khartoum, Sep., 1921, R.C.
S.G.M. 819, ć, Korti (Don.), Oct., 1922, H.H.K.
S.G.M. 2912, ć, 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.**

**Skins.**
*S.G.M. 140, ć, 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, ć, Suakin (R.S.), June, 1923, W.W.B.
S.G.M. 2913, ć, Suakin (R.S.), Oct., 1924, W.W.B.

24. NIGHT HERON.

*Nycticorax nycticorax nycticorax* (Linn.)
Resident—rivers—fairly common.

**Mounted.**

**Skins.**
*S.G.M. 815, ć, Abu Fatma (Don.), Nov., 1922, H.H.K.
*S.G.M. 817, ć, 816, ć, Letti (Don.), Nov., 1922, H.H.K.
*S.G.M. 2362, ć, 2364, ć, 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. 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 payesi* (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. 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.**

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

Family **BALÆNICIPITIDÆ.**

30. **SHOEBILL STORK.**

*Balæniceps 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) Sphenorynchus abdimii, 34.

31. WHITE STORK.
   Ciconia ciconia ciconia (Linn.)
   Spring and autumn passage migrant—abundant.

32. BLACK STORK.
   Ciconia nigra (Linn.)
   Winter visitor—savanna 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.

*Sphenornis abdimii* (Licht.)

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

**Mounted.**


**Skins.**

S.G.M. 2014, ♂, 2015, ♂ br., 2916, ♂ br., 2917, ♀ br., 3018, ♂ br., Wad Medani (B.N.), May and June, 1924, W.W.B.

S.G.M. 2449, ♂, Wad Medani (B.N.), Aug., 1923, H.W.B.

35. AFRICAN OPEN-BILL.

*Anastomus lamelliger*us *lamelliger*us Temm.

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

**Mounted.**


36. SADDLE-BILL or AFRICAN JABIRU.

*Ephippiorhynchus senegalensis* (Shaw).

Resident—rivers (south)—fairly common.

37. MARABOU.

*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 *Comatibis eremita*, 40.

   Only a small portion of front of head naked ... ... ... ... 4

25
4. Size large, wing over 13.0 ins. .... *Hagedashia hagedash*, 41.
   Size smaller, wing under 12.0 ins. .... *Plegadis falcinellus*, 42.

   Bill reddish brown .... .... *Platalea alba*, 44.

5. Bill greyish, barred with black and tipped with orange .... .... *Platalea leucorodia*, 43.

39. SACRED IBIS.
   *Threskiornis aethiopicus aethiopicus* (Lath.)
   Resident—rivers—fairly common.
   Mounted.
   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.
   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 PHENICOPTERI.

Family PHENICOPTERIDÆ.

KEY TO SPECIES. ♠

\[
\begin{align*}
& \text{Larger, wing about 18 ins. in adult;} \\
& \quad \text{upper mandible slightly convex and shutting down on the top of the} \\
& \quad \text{edges of the lower one} \quad \ldots \quad \text{Phænicopterus ruber, 45.} \\
& \text{Smaller, wing about 14 ins. in adult;} \\
& \quad \text{upper mandible flattened and shutting down between the rami of the} \\
& \quad \text{lower one} \quad \ldots \quad \ldots \quad \ldots \quad \text{Phæniconaias minor, 46.}
\end{align*}
\]

45. GREATER FLAMINGO.

Phænicopterus 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.

Phæniconaiias minor (Geoff.)

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

Order - - ANSERIFORMES.

Sub-Order ANSERES.

Family ANATIDÆ.

KEY TO SPECIES.

1. \[
\begin{align*}
& \text{Size large, wing over 12 ins.} \quad \ldots \quad 2 \\
& \text{Size smaller, wing under 12 ins.} \quad \ldots \quad 4
\end{align*}
\]

2. \[
\begin{align*}
& \text{Face bare; sides of head and throat white, hind-head glossy black; a} \\
& \quad \text{sharp spur on bend of wing} \quad \ldots \quad \text{Plectropterus gambensis, 66.} \\
& \quad \text{Face feathered to base of bill} \quad \ldots \quad 3
\end{align*}
\]

†—After Stark and Selater, Birds of South Africa.
Head greyish brown, except for a
white band on forehead ... ... Anser albiros, 65.
Head white, spotted with black; a
comb-like knob on base of bill in
male ... ... ... ... Sarkidiornis melanotus, 63.
Head white, tinged with rufous ... Casarca ferruginea, 67.
Front of head dirty white, a chestnut
patch on each side and surrounding
eye ... ... ... ... Alpochen aegyptiacus, 64.

Bill broadened and spatulate towards
the tip ... ... ... ... Spatula clypeata, 51.
Bill of approximately the same width
throughout ... ... ... ... 5

A speculum with metallic lustre on
wing ... ... ... ... 6
Speculum, if present, without metallic
lustre ... ... ... ... 10

Speculum metallic green or bronze-
green ... ... ... ... 7
Speculum metallic purple ... ... ... Anas platyrhynchos, 52.

Outer-web of innermost feather of
speculum white ... ... ... Anas penelope, 54.
Outer-web of innermost feather of
speculum not white ... ... ... 8

Speculum bordered in front by a
narrow band of chestnut, behind
by one of black and white ... ... 85
Speculum bordered in front by a
broad band of white, behind by a
narrower one, also white ... ... 9

Outer-half of speculum black; white
washed with chestnut on front of
speculum ... ... ... ... 10
Outer-half of speculum not black;
no chestnut tinge on white in front Anas crecca, 55.

Speculum salmon pink ... ... ... Anas erythrorhynchos, 56.
Speculum rufous brown, between two
narrow white bars ... ... ... Dafila acuta, 58.
Speculum white and black ... ... ... 11
No distinct speculum, but with a small
amount of white on that region of
wing ... ... ... ... 12
No speculum, or with only a slight
greyish tinge... ... ... ... 13

Speculum bordered in front and
behind with black or brown ... ... 14
Speculum bordered in front only with
black ... ... ... ... 15
Under parts mostly white ... ... ... 16
Under parts brown or greyish
brown ... ... ... ... Nyroca erythropthalma, 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. ... Nettaurus 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. ... Dasila 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 ... ... ... ... Pteroneura harlaubi, 59.
Head brown ... ... ... ... 19
Head mostly white ... ... ... ... Dendrocygna viduata, 60.

19. Tail-coverts whitish ... ... ... ... Nyroca ferina,♀️, and juv., 48.
Tail-coverts dark brown ... ... ... ... Nyroca ferina,♂️.
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 erythrorhyncha* (Gmel.)  
Resident—rivers (south)—not common.
57. GARGANEY.
   *Anas querquedula* Linn.

   Winter visitor—rivers—common.
   
   MOUNTED.
   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. 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.
62. **DWARF GOOSE.**

*Nettapus auritus* (Bodd.)
Resident—rivers (south)—fairly common.

**Mounted.**

63. **COMB-BILLED GOOSE.**

*Sarkidiornis melanotus* (Pennant).
Resident—rivers (south)—common.

**Mounted.**
**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.**

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.**
Order - - **FALCONIFORMES.**

Sub-Order **ACCIPITRES.**

Family **SAGITTARIIDÆ.**

68. **THE SECRETARY-BIRD.**

*Sagittarius serpentarius* Miller.

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

**Mounted.**

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

Family **EGYPIIDÆ.**

**KEY TO SPECIES.**

1. Nostrils round ... ... ... *Aegypius monachus*, 69.
   - Nostrils long and perpendicular ... 2
     - Nostrils long and horizontal ... 6
   - Tarsus shorter than middle-toe ... 3
   - Tarsus as long as, or longer than, middle-toe ... 5

2. Fourteen tail-feathers... ... ... 4
   - Twelve tail-feathers ... ... ... *Pseudogyps africanaus*, 72.

3. Under wing-coverts dark brown with white or tawny-white edges ... *Gyps rueppellii*, 71.
   - Under wing-coverts rust colour or pale rusty gold ... *Gyps fulvus*, 70.

4. Whole head naked ... ... ... *Torgos tracheliotes*, 73.
   - Top of head with a thick downy covering ... ... ... *Trigonoceros occipitalis*, 74.

5. 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 Province.

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. RÜPELL’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.*
10. 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.
   Small, wing under 9 ins.; belly barred ... Falco chiquera, 85.
12. Larger, wing over 9 ins.; belly not barred ... 13
   Larger, wing over 12.3 ins. ... 14
   Smaller, wing under 12.3 ins. ... Falco peregrinus, 77c.
13. 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
14. 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.
15. Ground colour of upper parts grey ... 17
   Ground colour of upper parts rufous brown ... 19
16. Under parts grey ... Falco vespertinus, & and juv., 83.
   Under parts rusty red ... Falco vespertinus, & 83.
17. Thighs and under tail-coverts rusty red ... Falco vespertinus, & 83.
   Thighs and under tail-coverts grey ... Falco ardosiaceus, 89.
18. 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.
19. Top of head grey with blackish streaks Falco tinnunculus, & 86.
   Top of head rufous brown with blackish streaks or bars ... 21
20. Nape with some white feathers ... Falco vespertinus, & 83.
   Nape without white ... 22
22. \[ \text{Wing over 9.8 ins.} \Rightarrow \text{Falco tinnunculus, } \varphi, \text{ and juv., } 86. \]
\[ \text{Wing under 9.8 ins.} \Rightarrow \text{Falco naumanni, } \varphi, \text{ and juv., } 88. \]
\[ \text{Nostrils concealed by bristles, a tuft of bristles on chin} \Rightarrow \text{Gypaetus barbatus, 114.} \]
\[ \text{Nostrils not concealed by bristles, nor with bristles on chin} \Rightarrow 24 \]
\[ \text{Tarsus feathered to bases of toes} \Rightarrow 25 \]
\[ \text{Tarsus not feathered to bases of toes} \Rightarrow 33 \]
\[ \text{Top of head with long crest} \Rightarrow \text{Lophiaetus occipitalis, 104.} \]
\[ \text{Top of head not (or only very slightly) crested} \Rightarrow 26 \]
\[ \text{Size large, wing over 20 ins.} \Rightarrow 27 \]
\[ \text{Size small, wing under 20 ins.} \Rightarrow 30 \]
\[ \text{Tail distinctly barred} \Rightarrow 28 \]
\[ \text{Tail not barred (or only faintly so)} \Rightarrow 29 \]
\[ \text{Under parts mostly, or entirely, white} \Rightarrow \text{Polemaetus bellicosus, 103.} \]
\[ \text{Under parts chocolate brown} \Rightarrow \text{Aquila heliaca, 96.} \]
\[ \text{General plumage dark brown} \Rightarrow \text{Aquila nipalensis, 97.} \]
\[ \text{General plumage tawny-brown} \Rightarrow \text{Aquila rapax, 98.} \]
\[ \text{Tail distinctly barred} \Rightarrow \text{Hieraaetus spilogaster, 101.} \]
\[ \text{Tail not barred (or only faintly so)} \Rightarrow 31 \]
\[ \text{Size larger; wing over 18 ins.} \Rightarrow \text{Aquila pomarina, 99.} \]
\[ \text{Size smaller, wing under 18 ins.} \Rightarrow 32 \]
\[ \text{Tail under 9.3 ins.; under parts with distinct longitudinal stripes} \Rightarrow \text{Hieraaetus pennatus, 102.} \]
\[ \text{Tail over 9.2 ins.; under parts not striped} \Rightarrow \text{Aquila wahlbergi, 100.} \]
\[ \text{Lores and region round eyes naked} \Rightarrow 34 \]
\[ \text{Lores and region round eyes clothed with scale-like feathers} \Rightarrow \text{Pernis apivorus, 94.} \]
\[ \text{Lores and region round eyes clothed with bristles or feathers (never scale-like)} \Rightarrow 35 \]
\[ \text{Tail long; about 13 ins.} \Rightarrow \text{Gymnogyps typhicus, 129.} \]
\[ \text{Tail medium; about 8 ins.} \Rightarrow \text{Ciconia vocifer, 113.} \]
\[ \text{Tail short; about 4 ins.} \Rightarrow \text{Terathopius ecaudatus, 112.} \]
\[ \text{Tail forked; outermost feathers the longest} \Rightarrow 36 \]
\[ \text{Tail square, graded, or rounded; outermost feathers equal to, or shorter (never longer) than, the rest} \Rightarrow 37 \]
\[ \text{Tail deeply forked; wing under 12 ins.} \Rightarrow \text{Chelictinia riocourii, 91.} \]
\[ \text{Tail only slightly forked; wing over 12 ins.} \Rightarrow \text{Milvus migrans, 92.} \]
\[ \text{Tarsus covered in front by transverse scutes} \Rightarrow 38 \]
\[ \text{Tarsus covered in front by hexagonal plates} \Rightarrow 54 \]
\[ \text{Tail about half the length of wing or shorter} \Rightarrow 39 \]
\[ \text{Tail more than three-fifths the length of wing} \Rightarrow 42 \]
39. "Bill, from the cere to the tip 20-23 mms. (under 0.9 ins.) ...
   Bill, from the cere to the tip 25 mms. or over (1.0 ins. or over) ...

40. Thighs and under tail-coverts entirely white or golden brownish white ...
    Thighs and under tail-coverts rust-colour, or white densely spotted or
    banded with rust-colour, or dark brown ...

41. "Head and neck pale isabelline, or golden brownish-white with black-
    Thighs and under tail-coverts entirely white or golden brownish white ...

42. Middle toe very long; inner toe not reaching as far as base of claw of
    Middle toe ...
    Inner toe reaching to the base of the middle toe ...

43. Nostrils round; with a bony tubercle near the upper border ...
    Nostrils long; without bony tubercle ...

44. Larger, wing over 7 ins. ...
    Smaller, wing under 7 ins. ...

45. Nostrils round; with a bony tubercle near upper border ...
    Nostrils long; without a bony tubercle ...

46. Wing over 10 ins. ...
    Wing under 10 ins. ...

47. Wing reddish chestnut, contrasting with colour of rest of plumage ...
    Wing not reddish chestnut ...

48. Wing under 8 ins. ...
    Wing over 8 ins. ...

49. Face with a distinct "ruff," giving an owl-like appearance ...
    Face with no "ruff" ...

50. Fifth primary plain, not emarginated on its outer web ...
    Fifth primary emarginated on its outer web like the others ...

51. Second primary emarginated on its outer web about an inch beyond the
    tips of the primary coverts ...
    Second primary emarginated at the level of the tips of the primary
    coverts ...

52. Upper parts brown ...
    Upper parts grey ...

53. Tail with cross-barring ...
    Tail without cross-barring ...

Buteo auguralis, 118.
Buteo buteo, 115.
Buteo ferax, 116.
Buteo rufifuscus, 117.
Melierax gabar, 124.
Melierax metabates, 123.
Kaupifalco monogrammi, 105.
Butastur rupipennis, 111.
Circus pygargus, 126.
Circus macrourus, 127.
Circus cyaneus, ♀, 125.
Circus cyanus, ♂, 125.
C 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. Elanus caeruleus, 93.

Tail brownish black with a broad pale brown or whitish bar about its middle and another at its tip ... Circaetus cinerascens, 110.

Tail blackish brown with numerous narrow, pale brown or whitish cross-bars ... ... ... Circaetus cinereus, 107.

Tail pale brown or greyish brown with two to four blackish brown cross-bars; or uniformly banded pale and blackish brown ... ... ... 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 ... Circaetus gallicus, 106.

Crop dusky brown; rest of under parts pure white ... ... ... Circaetus pectoralis, 108.

Crop greyish brown with whitish edges to feathers; breast banded greyish-brown and white ... ... ... Circaetus beaudouini, 109.

77a. EUROPEAN PÉREGRINE.

Falco peregrinus peregrinus Tunst.

Wanderer—arid—rare.

77b. EASTERN PÉREGRINE.

Falco peregrinus calidus Lath.

Winter visitor—arid—occasional.

Mounted.

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


77c. BARBARY FALCON.

Falco peregrinus pelegrinoides Temm.

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

Mounted.


77d. MEDITERRANEAN PÉREGRINE.

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. 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.

- Skins.
  ♢S.G.M. 840, ⊙, Letti (Don.), Dec., 1922, H.H.K.

78b. SUDAN LANNER.

_Falco biarmicus tanypterus_ Schleg.

Resident—arid—fairly common.

- Mounted.
  †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 asalon* 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—savanna (frequenting Doleib Palms)—common.

**Mounted.**

**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. 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, ♀, 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—savanna (jebels), highland I & II—common.
87. **FOX-KESTREL.**

*Falco alopex alopex* (Heugl.)
Resident—savana (jebels), highland I & II—fairly common.

**Mounted.**

**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.**

89. **GREY KESTREL.**

*Falco ardosiaceus* Bonn. and Vieill.
Resident—savana—fairly common.

**Mounted.**

**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, 9, 2852, 9, Erkowit (R.S.), Sep., 1924, W.W.B.*
*S.G.M. 2999, 9, Khartoum, June, 1925, R.C.*
†*S.G.M. 3004, 9, Khartoum, June, 1925, R.C.*

92c. **AFRICAN BLACK KITE.**

*Milvus migrans parasitus* (Daud.)

Resident—throughout—abundant.

**Mounted.**
*S.G.M. 1011, 9, Khartoum, Feb., 1913, A.L.B. (A.L.B.).*
*S.G.M. 3283, 9, Khartoum, July, 1926, R.C. (R.C.).*

**Skins.**
*S.G.M. 2249, 9, 2248, 9, 2217, J, Wad Medani (B.N.), Oct. and Dec., 1923, H.W.B.*
*S.G.M. 2998, J, 3003, 9, Khartoum, June, 1925, R. C.*

93. **BLACK-SHOULDERED KITE.**

*Elanus caeruleus caeruleus* (Desf.)

Resident—savana (occasionally north)—fairly common.

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

**Skins.**
*S.G.M. 180, 9, Tembura (B.G.), Apr., 1916, C.C.*
*S.G.M. 1700, 9, 1701, J, Kajo Kaji (Mon.), Mar. and Apr., 1917, J.H.M.*
*S.G.M. 2858, J, 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, 9, 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.  

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—savanna—not common.

101. AFRICAN HAWK-EAGLE.

* Hieraaetus spilogaster * (Bp.).  
Resident—savanna (jebels)—fairly common.

102. BOOTED EAGLE.

* Hieraaetus pennatus * (Gmel.)  
Winter visitor—throughout—not common.  

Mounted.  

103. MARTIAL EAGLE.

* Polemaetus bellicosus * (Daud.)  
Resident—savanna I—common.

104. LONG-CRESTED HAWK-EAGLE.

* Lophaetus occipitalis * (Daud.)  
Resident—savanna—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.  
*Kaupifako monogrammicus monogrammicus* (Temm.)  
Resident—savanna—fairly common.  
**Mounted.**  
**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—savanna—fairly common.

108. BLACK-BREASTED HARRIER-EAGLE.  
*Circaetus pectoralis* Smith.  
Resident—savanna—not common.

109. BEAUDOUIN’S HARRIER-EAGLE.  
*Circaetus beaudouini* Verr.  
Resident—Kordofan—not common.

110. SMALLER BANDED HARRIER-EAGLE.  
*Circaetus cinerascens* Müll.  
Resident—savanna—not common.

111. GRASSHOPPER BUZZARD-EAGLE.  
*Butastur rufipennis* (Sund.)  
Resident—throughout—common.  
**Mounted.**  
**Skins.**  
*S.G.M. 178, ♂, Wau (B.G.), July-Aug., 1916, C.C.*

112. BATELEUR.  
*Terathopius ecaudatus* (Daud.)  
Resident—throughout—fairly common.  
**Mounted.**  
113. AFRICAN RIVER-EAGLE.

*Cuncuma vocifer* (Daud.)

Resident—coast and rivers—fairly common.

*MOUNTED.*


*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—savanna—fairly common.

116. LONG-LEGGED BUZZARD.

*Buteo ferox ferox* (Gmel.)

Winter visitor—savanna (jebels)—fairly common.

117. AUGUR BUZZARD.

*Buteo rufusfuscus augur.*

Resident—Red Sea Hills and savanna (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—savanna—fairly common.

119. EUROPEAN SPARROW-HAWK.

*Accipiter nisus nisus* (Linn.)

Winter visitor—arid—rare.

120. ABYSSINIAN LITTLE SPARROW-HAWK.

*Accipiter minulus intermedius* Erl.

Resident—savanna II—fairly common.

121. BLACK SPARROW-HAWK.

*Accipiter melanoleucus* Smith.

Resident—savanna II—rare.
122. RÜPPELL'S GOSHAWK.

*Astur badius sphenurus* (Rüpp.)

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

**MOUNTED.**


**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—savanna 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.), May 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—savanna 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.)*

**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, ♀, 8843, ♀, Borgaig (Don.), Oct., 1922, H.H.K.*
*S.G.M. 849, ♀, Kerma (Don.), Oct., 1922, H.H.K.*
*S.G.M. 187, ♀, 188, ♂, 189, ♀, Zeidab (Ber.), June, 1921, W.E.G.*
*S.G.M. 2857, ♂, Kittib (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.*


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.*

*SKINS.*

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

47
Order - - **GALLIFORMES.**

Sub-Order **TURNICES.**

Family **TURNICIDÆ.**

**KEY TO SPECIES.**

Sides of head, neck and breast spotted
with black ... ... ... ... Turnix sylva
tica, 131.
Sides of head, neck and breast not
spotted ... ... ... ... Ortyxelos meiffre
nii, 132.

131. **KURRICHANE BUTTON-QUAIL.**

*Turnix sylva
tica lepurana* (Smith).
Resident—savanna—not common.

132. **QUAIL-PLOVER.**

*Ortyxelos meiffrenii* (Vieill.)
Resident—arid, west (acacia-grass)—common.

Sub-Order **GALLI.**

Family **PHASIANIDÆ.**

**KEY TO SPECIES.**

Size small; length 6.5 ins. or under
(wing, under 4.2 ins.) ... ... ... 2
1. Size large; length over 7 ins. (wing
over 5 ins.) ... ... ... ... 5
2. Under parts slate-grey and chestnut Excalfactoria adansoni, ♂, 142.
Under parts black and rufous ... ... Coturnix delegorguei, ♂, 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 ... ... ... ... ... Excalfactoria adansoni, ♀, 142.
4. Primaries barred on their outer webs;
under parts whitish ... ... Coturnix coturnix, 140.
Primaries not barred; under parts
rufous-buff ... ... ... ... ... Coturnix delegorguei, ♀, 141.
Plumage black, spotted with white ... ... Numida meleagris, 144.
Plumage black, spotted with pale blue Guttera edouardi, 145.
Plumage not black, spotted with white
or blue ... ... ... ... ... 6
5. Feet and toes bright red ... ... ... 7
Feet and toes yellow or orange ... ... 10
Upper parts with conspicuous whitish
markings ... ... ... ... ... 8
Upper parts without conspicuous
whitish markings ... ... ... 9
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 sephcana*, 135.

Centres of feathers of upper parts rufous; a uniform buff patch on centre of breast ... ... ... *Plilopachus petrosus*, 143.

Centres of feathers of upper parts dark brown; no buff patch on centre of breast ... ... ... *Francolinus squamatus*, 138.

General plumage vinous fawn ... *Ammoperdix heyi*, 133.

General plumage not vinous fawn ... 11

Under parts barred ... ... ... *Francolinus coqui*, 134.

Under parts blotched or spotted ... 12

Plumage slaty grey with chestnut markings ... ... ... *Francolinus erckeli*, 139.

Plumage brown with blackish markings *Francolinus icterorhynchus*, 136.

133. NUBIAN SEESEE.

*Ammoperdix heyi chokmleyi* Grant.

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

Mounted.


134. SCHLEGEL’S COQUI FRANCOLIN.

*Francolinus coqui schlegelii* Heugl.

Resident—Bahr el Ghazal—rare.

135. COL. GRANT’S CRESTED FRANCOLIN.

*Francolinus sephcana grantii* Hartl.

Resident—savana III—fairly common.

Skins.

*S.G.M. 2925, 8, Rejaf (Mon.), Jan., 1925, H.H.K.

136a. HEUGLIN’S DOUBLE-SPURRED FRANCOLIN.

*Francolinus icterorhynchus icterorhynchus* Heugl.

Resident—savana IV—common.

Mounted.


136b. DYBOWSKI’S DOUBLE-SPURRED FRANCOLIN.

*Francolinus icterorhynchus dybowskii* Oust.

Resident—savana III—common.

Mounted.

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

140. COMMON QUAIL.

Coturnix coturnix coturnix (Linn.)
Winter visitor—throughout—common.

Mounted.

Skins.
*S.G.M. 2435, ♂, 2444, ♀, 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 Delog.
Resident—savana—fairly common.
142. BLUE QUAIL.  
Excalfactoria adansoni (Verr.)  
Resident—savanna IV—not common.

143a. KORDOFAN STONE-PARTRIDGE OR COCKYOLLY.  
Ptilopachus petrosus brehmi Neum.  
Resident—arid, west (acacia-grass)—fairly common.  
MOUNTED.  
S.G.M. 1232, \( \varphi \), Khor Nabag (Kor.), Nov., 1913, N.G.H. (A.L.B.).  
SKINS.  
S.G.M. 1, \( \varphi \), 2, \( \varphi \), El Obeid (Kor.), Aug., 1921, J.E.M.M.

143b. BAHR EL GHAZAL STONE-PARTRIDGE OR COCKYOLLY.  
Ptilopachus petrosus butleri Sel. and Praed.  
Resident—savanna I—common.  
SKINS.  
S.G.M. 3184, \( \varphi \), 3185, \( \varphi \), 3187, \( \varphi \), 3188, \( \varphi \), 3189, \( \varphi \), 3190, \( \varphi \), Talodi (N.M.), Dec., 1925—Feb., 1926, J.W.C.

143c. LADO STONE-PARTRIDGE OR COCKYOLLY.  
Ptilopachus petrosus emini Neumann.  
Resident—savanna III and IV—common.  
SKINS.  
* S.G.M. 1770, \( \varphi \), Kajo Kaji (Mon.), Apr., 1917, J.H.M.  
* S.G.M. 1771, \( \varphi \), 1772, \( \varphi \), 1773, \( \varphi \), 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, \( \varphi \), 2541, \( \varphi \), Rahad River, near Medani (B.N.), Mar. and Apr., 1924, W.W.B.

144b. UGANDA TUFTED GUINEAFOWL.  
Numida meleagris major Hartl.  
Resident—savanna—abundant.  
SKINS.  
S.G.M. 2129, \( \varphi \), 2142, \( \varphi \), 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

Feathers of upper parts with dark centres only ... 3

2. Feathers of upper parts with white spots or streaks, as well as with some dark centres ... 4

Under wing-coverts chestnut... ... *Crex crex*, 146.

3. Under wing-coverts barred with black and white ... ... ... *Crescopsis egregia*, 147.

Breast spotted with white; size large, wing over 4.5 ins. ... *Porzana porzana*, 149.

Breast unspotted; size smaller, wing under 4.5 ins. ... ... ... 5

Under wing-coverts uniform brown; size smaller, wing under 3.7 ins. ... *Porzana pusilla*, 150.

Under wing-coverts uniform olive grey; size larger, wing over 3.8 ins. *Porzana parva*, 151.

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

Size smaller, wing under 4 ins. ... *Limnocorax flavirostra*, 148.

Size larger, wing over 7 ins. ... *Fulica atra*, 155.

Upper parts olive green; under parts reddish blue ... ... ... *Porphyrlula alleni*, 152.

Upper parts olive brown; under parts brown or grey ... ... ... 9

Size larger, wing over 6 ins.; basal half of both mandibles red ... *Gallinula chloropus*, 153.

Size smaller, wing under 6 ins.; no red on lower mandible ... ... ... *Gallinula angulata*, 154.

146. **CORN-CRAKE or LAND-RAIL.**

*Crex crex* (Linn.)

Winter visitor—throughout—fairly common.

**Mounted.**


**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.
*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.
*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.

151. LITTLE CRAKE.

*Porzana parva* (Scop.)
Winter visitor—throughout—not common.

152. ALLEN’S REED-HEN.

*Porphyryla alleni* (Thomson).
Resident—sudd—not common.

*MOUNTED.

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.

53
154. LESSER MOORHEN.
Gallinula angulata Sund.
Resident—rivers (south) and sudd—not common.

*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.

*SKINS.
*S.G.M. 1704, ?, Arabnarti (Don.), Nov., 1918, B.C.
*S.G.M. 781, 9, 782, 9, 783 9, Letti (Don.), Nov., 1922, H.H.K.

Family JACANIDÆ.

KEY TO SPECIES.

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

156. AFRICAN JACANA.
Actophilus africanus (Gmel.)
Resident—sudd and rivers (south)—abundant.

*MOUNTED.

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

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 ... ... ... Balearica pavonina, 158.
   No crown of straw-like bristles on top of head ... ... ... 2

2. A broad band of white on sides of face and neck; top of head naked, except for bristles, red in adults ... Megalornis grus, 160.
   A narrow white band from behind eye, meeting its fellow on nape; crown of head feathered, grey ... Anthropoides virgo, 159.
158. **SUDAN CROWNED CRANE.**  
*Balearica pavonina cecilia* Mitchell.  
Resident—rivers (south)—common.

159. **DEMOISELLE CRANE.**  
*Anthropoides virgo* (Linn.)  
Winter visitor—arid (acacia-grass) and rivers—common.

160. **EUROPEAN CRANE.**  
*Megathrornis grus grus* (Linn.)  
Winter visitor—arid (acacia-grass) and rivers—abundant.

Family **OTIDIDÆ.**

**Key to Species.**

1. \(\begin{align*}
&\text{Size large (over 30 ins. in length)} \quad \ldots \quad 2 \\
&\text{Size small (under 30 ins. in length)} \quad \ldots \quad 4
\end{align*}\)

2. \(\begin{align*}
&\text{Middle of crown and hind-neck greyish with vermiculations; wing-coverts like rest of upper parts} \quad \ldots \quad Choriotis arabs, \textbf{161}.
\end{align*}\)

3. \(\begin{align*}
&\text{Throat and breast slate-grey} \quad \ldots \quad Neotis cafra, \textbf{163}.
\end{align*}\)

4. \(\begin{align*}
&\text{Under parts mostly black} \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad 5
\end{align*}\)

5. \(\begin{align*}
&\text{A black line down centre of entire throat} \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad 6
\end{align*}\)

6. \(\begin{align*}
&\text{Rump and tail like rest of upper parts} \quad Lissotis melanogaster, \textbf{♀}, \textbf{167}.
\end{align*}\)

7. \(\begin{align*}
&\text{Head and neck of same general colour} \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad 8
\end{align*}\)

8. \(\begin{align*}
&\text{Tail with five distinct blackish bars} \quad Lissotis melanogaster, \textbf{♀}, \textbf{167}.
\end{align*}\)

9. \(\begin{align*}
&\text{Crown of head black and grey} \quad \ldots \quad Eupodotis senegalensis, \textbf{185}.
\end{align*}\)

161. **ARABIAN BUSTARD.**  
*Choriotis arabs* (Linn.)  
Resident—savanna 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 LIMICOLEÆ.

Family CHARADRIIDÆ.

**Key to Species.**

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Species</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hind toe present</td>
<td>...</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Bill longer than head</td>
<td>...</td>
<td>Hamatopus ostralegus, 188.</td>
</tr>
<tr>
<td>3</td>
<td>A sharp spur on bend of wing</td>
<td>...</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>With face-wattles</td>
<td>...</td>
<td>Xiphidopterus albiceps, 183.</td>
</tr>
<tr>
<td>5</td>
<td>Without face-wattles</td>
<td>...</td>
<td>Hoplopterus spinosus, 182.</td>
</tr>
<tr>
<td>6</td>
<td>Wing over 6.3 ins.</td>
<td>...</td>
<td>Charadrius dominicus, 177.</td>
</tr>
<tr>
<td>7</td>
<td>Outer tail-feathers white with a single blackish band near tip</td>
<td>...</td>
<td>Charadrius hiaticula, 169.</td>
</tr>
<tr>
<td>8</td>
<td>With two blackish bands across chest</td>
<td>...</td>
<td>Charadrius tricollaris, 173.</td>
</tr>
<tr>
<td>9</td>
<td>With a single black band across chest</td>
<td>...</td>
<td>Charadrius dubius, 170.</td>
</tr>
<tr>
<td>10</td>
<td>A white collar on hind neck continuous with white of under parts</td>
<td>...</td>
<td>Charadrius alexandrinus, 171.</td>
</tr>
<tr>
<td>11</td>
<td>Tarsus shorter than middle toe with middle toe with claw; tip of bill turned upwards</td>
<td>...</td>
<td>Arenaria interpres, 187.</td>
</tr>
<tr>
<td>12</td>
<td>First primary the longest</td>
<td>...</td>
<td>Squatarola squatarola, 178.</td>
</tr>
<tr>
<td>13</td>
<td>Tail with a black bar; wing over 7.3 ins.</td>
<td>...</td>
<td>Chettusia gregaria, 180.</td>
</tr>
</tbody>
</table>

†—After Reichenow, Die Vogel Afrikas.
169. SIBERIAN RINGED PLOVER.
Charadrius hiaticula tundra (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.

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.

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, 940, 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, 1241, Khartoum, Apr., 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. SOCIABLE PLOVER.

Chettusia gregaria (Pallas).
Winter visitor—arid—rare.
181. WHITE-TAILED PLOVER.
    *Vanellus chettusia leucura* (Licht.)
    Winter visitor—arid—fairly common.
    Mounted.

182. SPUR-WINGED PLOVER.
    *Hoplopterus spinosus* (Linn.)
    Resident—rivers—very common.
    Mounted.
    Skins.
    S.G.M. 52, ♀, North of Shambe (E.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.

184. SENEGAL WATTLED PLOVER.
    *Afrihyx senegalus senegalus* (Linn.)
    Resident—savanna (rivers)—fairly common.
    Mounted.
    Skins.
    *S.G.M. 1790, ♀, Rejaf (Mon.), 1917, J.H.M.

185. RED-WATTLED PLOVER.
    *Sarcophorus tectus tectus* (Bodd.)
    Resident—savanna (clearings), arid (thorn-forest)—common.
    Mounted.
    Skins.
    S.G.M. 2461, ♂, 3264, ♀, Rahad River, near Medani (B.N.), Dec., 1923, and Feb., 1924, W.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, 9, 935, 9, Suakin (R.S.), May-June, 1923, W.W.B.
*S.G.M. 934, 9, Trinkitat (R.S.), May-June, 1923, W.W.B.
S.G.M. 2871, 9, 2872, 9, Suakin (R.S.), Oct., 1924, W.W.B.

188. OYSTER-CATCHER.

_Hematopus ostralegus ostralegus_ Linn.
Winter visitor—coast and rivers—rare.

Family _RECURVIROSTRIDÆ_.

**KEY TO SPECIES.**

\[
\begin{align*}
\text{Bill straight; legs very long, tarsus over 4.5 ins.} & \quad \ldots \quad \ldots \quad \text{Himantopus himantopus, 190.} \\
\text{Bill curved upwards; legs medium, tarsus under 4 ins.} & \quad \ldots \quad \ldots \quad \text{Recurvirostra avosetta, 189.}
\end{align*}
\]

189. AVOCET.

_Recurvirostra avosetta_ Linn.
Resident—coast and rivers (north)—rare.

190. BLACK-WINGED STILT.

_Himantopus himantopus_ (Linn.)
Resident—coast and rivers—common.

Mounted.

Skins.
S.G.M. 44, 9, 46, 9, Zeidab (Ber.), Mar., 1921, H.W.B.
S.G.M. 1778, 9, Makwar (B.N.), Dec., 1919, H.W.B.
S.G.M. 2870, 9, Suakin (R.S.), Oct., 1924, W.W.B.
S.G.M. 2424, 9, 2425, 9, Wad Medani (B.N.), Nov., 1923, H.W.B.

61
Family *Scolopacidae*.

**Key to Species.†**

1. { Hind toe present  ...  ...  ...  2  
   Hind toe absent  ...  ...  ...  *Croctethia 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  ...  ...  13  

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.  ...  ...  ...  *Limnocryptes 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  ...  ...  *Numenius phaeopus*, 213.  
    Top of head pale brown streaked with dark brown  ...  ...  *Numenius arquata*, 212.

† After Reichenow, *Die Vogel Afrikas.*
14. { Bill considerably longer than tarsus ... 15
d 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.

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.

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.**

*Roslratula benghalensis* (Linn.)

Resident—rivers—not common.

**Mounted.**


196. **CURLEW-SANDPIPER.**

*Erolia testacea* (Pallas).

Winter visitor—coast and rivers—abundant.

**Mounted.**


**Skins.**


*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, ?, Trinkitat (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 minuta* (Leisl.)

Winter visitor—coast and rivers—abundant.

**Mounted.**


**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. 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.*


*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.*


*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_ (Gült.)

Winter visitor—coast—rare.
204. COMMON SANDPIPER.

*Actitis hypoleucos* (Linn.)

Winter visitor—rivers—common.

**Mounted.**


**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, ♀, Rosières (Fung), Sep., 1910, A.L.B.*

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

*S.G.M. 87, ♀, Shambé (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.**


**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.**


**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, ♀, 2084, ♀, 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.**

**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.**

**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.**


**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. ⼿ Tail strongly forked ... ... ... ... 2

2. Tail square, slightly forked or rounded 3

3. Under wing-coverts chestnut ... *Glareola pratincola*, 218.

4. Under wing-coverts black ... *Glareola norbmanni*, 219.

5. Tarsus short, less than twice the length of middle toe ... ... ... ... 4

6. Tarsus long, more than twice the length of middle toe ... ... ... ... 5

7. General colour of upper parts ashy brown; flight-feathers blackish brown ... ... ... ... *Gałachrysa nuchalis*, 220.

8. General colour of upper parts slate-grey and black; flight-feathers white and black ... ... ... ... *Pliuuanus aegyptius*, 221.

9. Bill with both mandibles curved downwards ... ... ... ... ... 6

10. Bill with upper mandible curved downwards, lower straight ... ... ... ... 7


12. No black patch on breast ... *Cursorius cursor*, 214.

13. Two chestnut bands on chest ... *Rhinoptilus cinctus*, 216.

214. CREAM-COLOURED COURSER.

*Cursorius cursor cursor* (Lath.)

Winter visitor—arid—fairly common.

**Mounted.**

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

215. TEMMINCK'S COURSER.

*Cursorius temminckii temminckii* Swains.

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

216. HEUGLIN'S COURSER.

*Rhinoptilus cinctus cinctus* (Heugl.)

Resident—savanna—rare.

217. BRONZE-WING COURSER.

*Rhinoptilus chalcopeterus* (Temm.)

Resident—savanna—not common.

**Mounted.**

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

218a. EUROPEAN PRATINCOLE.

*Glareola pratincola pratincola* (Linn.)

Winter visitor—rivers—very common.

**Mounted.**

**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.**

**Skins.**
*S.G.M. 1786, ♂, 1787, ♂, 2222, ♀, 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.
*Galaehrysia nuchalis nuchalis* (Gray).
Resident—rivers (north)—rare.

220b. EMIN'S WHITE-COLLARED PRATINCOLE.
*Galaehrysia nuchalis emini* (Shell.)
Resident—rivers (extreme south)—not common.

221. EGYPTIAN PLOVER OR CROCODILE-BIRD.
*Pluvianus aegyptius* (Linn.)
Resident—rivers—common.

**Mounted.**

**Skins.**
*S.G.M. 69, ♂, Roseries (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 edinoumurus*, 223.  
   Without white and blackish-brown bars on median wing-coverts  ...  *Burhinus senegalensis*, 224.  

70
223a. STONE-CURLEW.

*Burhinus oedicnemus oedicnemus* (Linn.)

Winter visitor—rivers—fairly common.

223b. PERSIAN STONE-CURLEW.

*Burhinus oedicnemus astatus* Hart.

Wanderer (?)—recorded from Red Sea Province.

224. SENEegal STONE-CURLEW.

*Burhinus senegalensis* (Swains)

Resident—rivers—common.

Mounted.


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, ♀, Tabodi (N.M.), Feb., 1926, J.W.C.

Sub-Order LARI.

Family LARIDÆ.

Key to Species. ‡

1. Bill with both mandibles much compressed, the lower considerably longer than the upper ... ... *Rynchops flavirostris*, 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 \ldots \ldots 3  
Head pure white \ldots \ldots \ldots 6  
Head neither pure white nor with a well defined hood \ldots \ldots \ldots 9  

3. \{ Mantle clear gray \ldots \ldots \ldots 4  
Mantle dark brown to sooty \ldots \ldots \ldots 5  

4. \{ Hood black \ldots \ldots \ldots  \textit{Larus ichthyaetus}, \textit{230}.  
Hood dark brown \ldots \ldots \ldots \textit{Larus ridibundus}, \textit{231}.  

5. \{ Hood and fore-neck jet-black \ldots \ldots \ldots \textit{Larus leucopthalmus}, \textit{232}.  
Hood and fore-neck dark brown \ldots \ldots \ldots \textit{Larus hemprichi}, \textit{233}.  

6. \{ Smaller, wing under 13 ins. \ldots \ldots \ldots \textit{Larus genei}, \textit{229}.  
Larger, wing over 14 ins. \ldots \ldots \ldots 7  

7. \{ Quills mostly black \ldots \ldots \ldots 8  
Quills mostly pale grey \ldots \ldots \ldots \textit{Larus hyperboreus}, \textit{228}.  

8. \{ Mantle sooty black to dark slate \ldots \ldots \ldots \textit{Larus fuscus}, \textit{227}.  
Mantle pale blue-grey\ldots \ldots \ldots \textit{Larus argentatus}, \textit{226}.  

9. \{ Tail white or grey, usually with a dark terminal, or sub-terminal, band; upper tail-coverts almost unspotted; abdomen white or grey \ldots \ldots \ldots 10  
Tail and upper tail-coverts mottled with brownish; abdomen brown \ldots \ldots \ldots 13  

10. \{ Outermost primaries blackish or umber-brown \ldots \ldots \ldots 11  
Outermost primaries white edged with black \ldots \ldots \ldots \textit{Larus ridibundus}, \textit{juv.}, \textit{231}.  

11. \{ Larger, wing over 18 ins. \ldots \ldots \ldots \textit{Larus ichthyaetus juv.}, \textit{230}.  
Smaller, wing under 14 ins. \ldots \ldots \ldots 12  

12. \{ Outermost tail-feathers mottled with greyish \ldots \ldots \ldots \textit{Larus leucopthalmus}, \textit{juv.}, \textit{232}.  
Outermost tail-feathers with no grey \textit{Larus hemprichi}, \textit{juv.}, \textit{233}.  

13. \{ Quills sooty brown to black; smaller, wing 16\textendash}16.5 ins. \ldots \ldots \ldots \textit{Larus fuscus}, \textit{juv.}, \textit{227}.  
Quills dark umber with paler inner webs; larger, wing 16.75\textendash}18 ins. \ldots \ldots \ldots \textit{Larus argentatus}, \textit{juv.}, \textit{226}.  
Quills clay-brown with paler inner webs; larger, wing 17\textendash}18 ins. \ldots \ldots \ldots \textit{Larus hyperboreus}, \textit{juv.}, \textit{228}.  

14. \{ Tail very distinctly forked, outermost feathers considerably longer than innermost; toes completely webbed \ldots \ldots \ldots \ldots 15  
Tail only slightly forked, outermost feathers very little longer than middle ones; toes only half webbed \ldots \ldots \ldots 28  
Tail wedge-shaped, slightly forked in middle, fourth pair of feathers the longest \ldots \ldots \ldots \textit{Anous stolidus}, \textit{246}.  

72
15. \( \begin{cases} \text{Larger, wing over 15.5 ins., tail less} \\
\text{than one-third the length of wing} \quad \text{Hydroprogne caspia, 235.} \\
\text{Smaller, wing under 14.5 ins., tail more} \\
\text{than one-third the length of wing} \quad \text{16} \end{cases} \)

16. \( \begin{cases} \text{Tarsus very long, exceeding middle toe} \\
\text{and claw; bill rather short and} \\
\text{robust; tail less than half the} \\
\text{length of wing} \quad \text{Gelochelidon nilotica, 234.} \\
\text{Tarsus short, less than middle toe} \\
\text{and claw; bill long and slender;} \\
\text{tail more than half the length of} \\
\text{wing} \quad \text{17} \end{cases} \)

17. \( \begin{cases} \text{Larger, wing over 9.5 ins.} \\
\text{Smaller, wing less than 7 ins.} \quad \text{Sterna albifrons, 241.} \\
\text{18} \end{cases} \)

18. \( \begin{cases} \text{Larger, wing over 11 ins.} \\
\text{Smaller, wing under 10.5 ins.} \quad \text{19} \end{cases} \)

19. \( \begin{cases} \text{Forehead black to base of bill} \\
\text{Front of forehead white} \quad \text{20} \end{cases} \)

20. \( \begin{cases} \text{Upper tail-coverts white in strong} \\
\text{contrast with the grey of upper parts} \quad \text{Sterna hirundo, 236.} \\
\text{Upper tail-coverts grey like the upper} \\
\text{parts} \quad \text{Sterna repressa, 237.} \end{cases} \)

21. \( \begin{cases} \text{Crown of head not mottled} \\
\text{Crown (and plumage generally) tend-} \\
\text{ing to be mottled (immature and} \\
\text{winter birds)} \quad \text{22} \end{cases} \)

22. \( \begin{cases} \text{Tail-feathers grey throughout} \\
\text{Tail-feathers grey with some white on} \\
\text{the outer half of inner webs} \quad \text{Sterna anasthetus, juv., and winter, 237.} \\
\text{Tail-feathers white with grey outer} \\
\text{webs} \quad \text{Sterna anasthetus, juv., and winter, 242.} \end{cases} \)

23. \( \begin{cases} \text{Forehead black to base of bill} \\
\text{Front of forehead white} \quad \text{24} \end{cases} \)

24. \( \begin{cases} \text{Bill black, yellowish towards tip} \\
\text{Bill orange-yellow to red} \quad \text{Sterna sandvicensis, 238.} \\
\text{Sterna bengalensis, 239.} \end{cases} \)

25. \( \begin{cases} \text{Bill black or horn colour, generally} \\
\text{with some yellow at base or tip} \quad \text{Sterna sandvicensis, juv., and winter, 238.} \\
\text{Bill entirely yellow} \quad \text{26} \end{cases} \)

26. \( \begin{cases} \text{Top of head mottled (immature)} \\
\text{Top of head not mottled} \quad \text{Sterna bergii, 240.} \end{cases} \)

27. \( \begin{cases} \text{Wing over 12.5 ins.} \\
\text{Wing under 12.5 ins.} \quad \text{Sterna bergii, juv., and winter, 240.} \\
\text{Sterna bengalensis, juv., and winter, 239.} \end{cases} \)

28. \( \begin{cases} \text{Under parts black or dark grey} \\
\text{(summer plumage)} \quad \text{29} \end{cases} \)

29. \( \begin{cases} \text{Under parts white (winter plumage} \\
\text{and young)} \quad \text{31} \end{cases} \)

73
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 blackish 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 winter, 245.
   Smaller; bill more slender; feet with webs less incised ... ... *Chlidonias nigra,* juv., and winter, 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.


Skins.
*S.G.M. 911, θ, 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 ichthyaetus* 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 leucophthalmus* 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.

234. GULL-BILLED TERN.

*Gelochelidon nilotica nilotica* (Gmel.)
Winter visitor—rivers—common.

Skins.
*S.G.M. 34, 35, 36, 39, Khartoum, Oct., 1921, B.C.

235. CASPIAN TERN.

*Hydroprogne caspia* (Pallas)
Resident—coast (rivers in winter)—fairly common.

Skins.
*S.G.M. 914, 2, 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, ♀, 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 anæsthetus 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.**


**Skins.**

S.G.M. 2883, ¿, Atbara (Ber.), July, 1924, W.W.B.

245. WHISKEHED 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, ¿, Khartoum, Sep., 1922, W.W.B.*
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 complete ... ... ... ... *Pterocles senegalensis*, ¿, 249.
   Abdomen black with buffish bars; breast-band broken ... ... ... *Pterocles senegalensis*, ¿, 249.
5. \( \begin{align*} &\text{Breast spotted} \quad \ldots \quad \ldots \quad \ldots \quad 6 \\ &\text{Breast barred} \quad \ldots \quad \ldots \quad \ldots \quad 7 \\ &\text{Breast uniform} \quad \ldots \quad \ldots \quad \ldots \quad 8 \\ \end{align*} \)

Abdomen and flanks black, barred with buff; upper parts barred with black

6. \( \begin{align*} &\text{Centre of abdomen black, flanks uniform whitish buff; upper parts spotted with dull black} \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \text{Pterocles senegalensis, juv., 249.} \\ \end{align*} \)

\text{Throat yellow} \quad \ldots \quad \ldots \quad \ldots \quad \text{Eremialector coronatus, \(\varphi\) and juv., 250.}

7. \( \begin{align*} &\text{Throat barred like the breast} \quad \ldots \quad \ldots \quad \ldots \quad \text{Eremialector lichtensteini, \(\varphi\) and juv., 251.} \\ \end{align*} \)

8. \( \begin{align*} &\text{Throat yellow; abdomen not barred} \quad 9 \\ &\text{Throat not yellow; abdomen white barred with black} \quad \ldots \quad \ldots \quad \ldots \quad \text{Eremialector quadricinctus, \(\varphi\) and juv., 252.} \\ \end{align*} \)

Abdomen uniform sandy buff; a black line down centre of throat and two on forehead

9. \( \begin{align*} &\text{Centre of abdomen black; no black on throat and forehead} \quad \ldots \quad \ldots \quad \ldots \quad \text{Eremialector coronatus, \(\varphi\), 250.} \\ &\text{Abdomen uniform sandy buff; a black line down centre of throat and two on forehead} \quad \ldots \quad \ldots \quad \ldots \quad \text{Pterocles senegalensis, \(\varphi\), 248.} \\ \end{align*} \)

248. \textbf{SENEGAL SANDGROUSE.}

\textit{Pterocles senegalus} (Linn.)

\textbf{Resident—arid (scrub)—fairly common.}

\textbf{Mounted.}

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

\textbf{Skins.}

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

249. \textbf{CHESTNUT-BELLIED SANDGROUSE.}

\textit{Pterocles senegalensis senegalensis} Licht.

\textbf{Resident—arid (scrub)—abundant.}

\textbf{Mounted.}

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

\textbf{Skins.}

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

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

S.G.M. 2957, \(\varphi\), 2658, \(\varphi\), 2659, \(\varphi\), Gendettu (Ber.), Oct., 1924, W.W.B.

S.G.M. 3236, \(\varphi\), Khor Hanoiyit, P. Sudan (R.S.), Apr., 1926, H.B.J.

250. \textbf{CROWNED SANDGROUSE.}

\textit{Eremialector coronatus coronatus} (Licht.)

\textbf{Resident—desert and arid—(thin scrub)—fairly common.}

\textbf{Mounted.}

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

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

\textbf{Skins.}

*S.G.M. 10, \(\varphi\), 806, \(\varphi\), Letti basin (Don.), Nov., 1920, and Dec., 1922, H.H.K.
251. LICHTENSTEIN’S SANDGROUSE.

*Eremiaeector lichtensteinii lichtensteinii* (Temm.)

Resident—arid—fairly common.

**Mounted.**


**Skins.**

*S.G.M. 4, 7, Jobel Meidab (Dar.), Feb., 1922, H.L. and W.P.L.
*S.G.M. 6, 7, Sayah (Dar.), Feb., 1922, H.L. and W.P.L.
*S.G.M. 7, 7, 7, 7, Ghaddar (Don.), Nov. and Dec., 1921, H.H.K.
S.G.M. 2450, 7, 2451, 7, Khartoum, Jan., 1924, E.H.M.
*S.G.M. 2635, 7, 2649, 7, Erkowit (R.S.), Sept., 1924, W.W.B.

252. EASTERN FOUR-BANDED SANDGROUSE.

*Eremiaeector quadricinctus lowei* Grant.

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

**Skins.**

*S.G.M. 12, 7, El Obeid (Kor.), Aug., 1921, J.E.M.M.
*S.G.M. 1546, 7, Ikoto (Mon.), Feb., 1918, J.H.R.Y.
S.G.M. 2494, 7, Rahad R. near Medani (B.N.), June, 1924, W.W.B.
S.G.M. 2926, 7, 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 scalia*, 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.
   A collar of rufous-tipped black feathers on front and sides of neck *Stigmatopelia senegalensis*, 260.
   Whole front of face and throat black *Eua capensis*, 7, 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
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.

Tail considerably longer than wing... Ena capensis, ♂, 261.
Tail shorter than wing... ♂, 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 turgia Geyr.
Resident—jebels (Darfur)—common.

253b. EGYPTIAN ROCK-PIGEON.

Columba livia schimperi Bp.
Resident—jebels (extreme north)—common.

Mounted.
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.
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. palaestinica. 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.**


**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.C.

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. 2605, ♂, Sinkat (U.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—savanna—fairly common.

**Mounted.**


257a. SUDAN MOURNING DOVE.

*Streptopelia decipiens decipiens* (Finsch and Hartl.)

Resident—arid—very common.

**Mounted.**


**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, ♂, Gendettu (Ber.), Oct., 1924, W.W.B.
257b. EAST AFRICAN MOURNING DOVE.

*Streptopelia decipiens permista* (Reichw.)

Resident—savannah—very common.

---

258a. SUDAN VINACEOUS DOVE.

*Streptopelia vinacea barbaru* Antin.

Resident—savannah—not common.

Skins.

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

---

258b. BOGOSLAND VINACEOUS DOVE.

*Streptopelia vinacea erythrea* (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 equatorialis* (Erl.)

Resident—savannah 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.


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.

*Œna capensis capensis* (Linn.)

Resident—throughout—common.

Mounted.


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—savanna—not common.

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

*Turtur abyssinicus delicatula* (Sharpe).

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

Mounted.


Skins.

*S.G.M. 1631, ♂, Kajo Kaji (Mon.), Apr., 1917, J.H.M.
S.G.M. 2664, ♀, Kitiab (Ber.), Nov., 1924, W.W.B.

264. BRUCE’S GREEN PIGEON.

*Vinago waalia* (Meyer).

Resident—savanna—common.

Mounted.


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.
### 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** ... *Cæothmocharæs 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** ... 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** ... 275.
   - **No green on chest; outer tail-feathers green with white or chestnut spots** *Lampromorpha caprins*, 274.

6. **Head ashy-black** ... 7
   - **Head rufous** ... *Lampromorpha caprins*, juv., 274.

7. **Under parts white barred with brown** *Chrysococcyx cupreus*,♀, 273.
   - **Under parts buffy white barred with brown** *Lampromorpha 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** ... 266.
   - **Smaller, wing under 8 ins.; throat rufous in adult** ... *Cuvulus 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 ... ... 277.
    Back rufous; head and nape greenish
    black ... ... 278.

14. {Tail longer than wing ... ... 15
    Tail equal to, or shorter than, wing... Pachycopeyx validus, 269.

15. {Throat and chest streaked with black Clamator cefor, 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.

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 (E.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—savanna—fairly common.

**Mounted.**


**Skins.**

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

268. JACKSON’S CUCKOO.

*Cuculus jacksoni* Sharpe.

Resident—savanna—fairly common.

269. THICK-BILLED CUCKOO.

*Pachycopeyx validus* (Reichw.)

Resident—savanna IV—not common.

270. GREAT SPOTTED CUCKOO.

*Clamator glandarius* (Linn.)

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

**Mounted.**


**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 ?)—savanna and arid (acacia-forest)—fairly common.

**Mounted.**


**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 ?)—savanna—not common.

**MOUNTED.**

273. **EMERALD CUCKOO.**  
*Chrysococcyx cupreus cupreus* (Shaw.)

Resident—savanna III—rare.

274. **DIDRIC OR COPPERY CUCKOO.**  
*Lampromorpha caprius* (Bodd.)

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

**MOUNTED.**
S.G.M. 1166, ♂, Gigging (Mon.), May, 1909, 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)—savanna—fairly common.

**MOUNTED.**

**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—savanna 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—savanna and swamps—common.

278. SENEGAL COUCAL.

Centropus senegalensis senegalensis (Linn.)
Resident—savanna and swamps—common.

Mounted.

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—savanna and arid (acacia forest)—common.

Mounted.

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, ♂, Kitiab (Ber.), Nov., 1924, W.W.B.
S.G.M. 2232, ♀, Wad Medani (B.N.), Aug., 1913, V.P.W.

280. NIAM-NIAM GREEN COUCAL.

Centomochares aereus intermedius Sharpe.
Resident—savanna 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 ... ... ... ... Musophaga rossii, 283.
  Breast not green ... ... ... ... Turaco leucolophus, 282.

3. { Crest white ... ... ... ... Turaco leucolophus, 282.
  Crest blackish ... ... ... ... Turaco leucolophus, 281.

4. { Head crested ... ... ... ... Corythaixoides leucogaster, 285.
  Head not crested ... ... ... ... Crinifer zonurus, 284.
281. WHITE-CHEEKED PLANTAIN-EATER.

_Turacus leucotis leucotis_ (Rüpp.)

Wanderer—savanna II—occasional.

282. WHITE-CRESTED LOURIE.

_Turacus leucolophus_ (Heugl.)

Resident—savanna—fairly common.

Mount.


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—savanna IV—not common.

284. ABBYSSINIAN GREY PLANTAIN-EATER.

_Crini fer zonurus_ (Rüpp.)

Resident—savanna—very common.

Mount.

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.

Mount.

Sub-Order PSITTACI.

Family PSITTAEGINAE.

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 .......... 290.

3. { Tail red .......... 286. Psittacus erithacus.
   { Tail not red .......... 288. Poicephalus meyeri.

286. GREY PARROT.

Psittacus erithacus erithacus Linn.

Resident—savana IV—not common.

MOUNTED.
S.G.M. 1204, ³, ?, (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, ³, 1202, ², El Ein Station (Kor.), Mar., 1914, A.L.B. (A.L.B.).

289a. SENEGAL PARRAKEET.

Psittacula krameri krameri (Scop.)

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

MOUNTED.
289b. ABYSSINIAN PARRAKEET.

*Psittacula krameri parivirostris* (Souan.)

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

**Mounted.**


**Skins.**

S.G.M. 2465, ♂, 2467, ♀, 3288, ♂?, Rahad R., near Medani (B.N.), Mar., 1924, W.W.B.
S.G.M. 2548, ♀, Um Deheia, 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 uga*nda Neum.

Resident—savanna III and IV—fairly common.

**Mounted.**


**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 - - CORACIIFORMES.

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.

Mounting.


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, ♀, Erinowit (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.

Mounting.


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, ♀, Kitiab (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 naevius naevius* Daud.

Resident—savannah III and IV—fairly common.

Mounting.


Skins.

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

294. **NILE VALLEY BROAD-BILLED ROLLER.**

*Eurystomus afer aethiopicus* Neum.

Resident—savannah—not common.

Mounting.


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
   - Plumage black and white, no metallic colour ... ... ... *Ceryle rudis*, 295.
     - Plumage not black and white, always with at least some metallic colouring 3
2. Larger, wing over 2.5 ins. ... ... 4
   - Smaller, wing under 2.5 ins. ... ... 7
     - Bill entirely black ... ... ... *Alcedo atthis*, 297.
       - Bill with lower mandible red, upper either red or brownish black ... 5
       - Bill with lower mandible black, upper red ... ... ... ... ... 6
     - Head uniformly grey, belly chestnut (in adult); size larger, wing over 3.5 ins. ... ... ... *Halecyon leucocephala*, 302.
       - Head streaked with blackish brown; under parts more or less streaked; size smaller, wing under 3.5 ins. ... ... ... *Halecyon chelicuti*, 303.
3. Smaller, wing under 4.4 ins. ... ... *Halecyon sevegalensis*, 300.
   - Larger, wing over 4.4 ins. ... ... *Halecyon malimbicus*, 301.
   - 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.**


**Skins.**

S.G.M. 213, ♂, Zeidab (Ber.), June, 1921, W.E.G.
S.G.M. 2180, ♂, Khartoum, Sept., 1921, R.C.
S.G.M. 2405, ♂, 2436, ♂, Wad Medani (B.N.), Aug.-Nov., 1923, H.W.B.
S.G.M. 2998, ♂, 2999, ♂, 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.**


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.

299. PYGMY KINGFISHER.
   *Ispidina picta picta* (Bodd.)
   Resident—swamps and rivers (south)—common.
   Mounted.
   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—savanna—common.
   Mounted.
   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—savanna—common.
   Mounted.

301. UGANDA BLUE-BREASTED KINGFISHER.
   *Halcyon malimbicus prenticei* Mearns.
   Resident—savanna—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—savanna and arid (acacia-forest)—common.

Mounted.


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—savanna—not common.

Mounted.


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 albicolis, 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. ... ... _Melitophagus pusillus, 309._

5. Tail forked ... ... ... ... _Dicrocercus hirundineus, juv., 311._
   Tail not forked ... ... ... ... 6
6. Under parts carmine red; throat blackish blue...
Under parts pale brown; throat red

7. Throat brown; cheeks blue
Throat yellow; cheeks not blue

304. EUROPEAN BEE-EATER.
Merops apiaster Linn.
Spring and autumn passage migrant—common.

MOUNTED.

SKINS.
S.G.M. 2728, ♀, Erkowit (R.S.), Sep., 1924, W.W.B.
S.G.M. 3234, ♂, 3235, ♀, Khor Hanoieit, 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.

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, ♀, 2732, ♀, Zeidab (Ber.), Aug., 1924, W.W.B.
S.G.M. 2729, ♀, 2730, ♂, Erkowit (R.S.), Sep., 1924, W.W.B.
S.G.M. 3232, ♂, 3233, ♀, Khor Hanoieit, P. Sudan (R.S.), Apr., 1926, H.B.J.

306a. LITTLE GREEN BEE-EATER.
Merops orientalis viridissimus Swains.
Resident—throughout—common.

MOUNTED.

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.
308b. **EGYPTIAN LITTLE BEE-EATER.**

*Merops orientalis cleopatra* Nicoll.

Winter visitor—north—not common.

307. **NUBIAN CARMIN PRO BEE EATER.**

*Merops nubicus nubicus* Gmel.

Resident—savanna 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.**

*T.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).

**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. 2729, ♂, Gendet (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—savanna and arid (acacia-forest)—common.

**Mounted.**


**Skins.**

*S.G.M. 248, 5, 249, 5, Yei (Mon.), Dec., 1915, C.C.
*S.G.M. 1715, 9, 1716, 9, Kajo Kaji (Mon.), Jan. and Feb., 1917, J.H.M.
*S.G.M. 2323, 5, 2316, 9, 2406, 9, 2427, 9, Wad Medani (B.N.), Sep. and Nov., 1923, H.W.B.
*S.G.M. 250, 9, 251, 9, Khartoum, Sep., 1922, W.W.B.
*S.G.M. 2474, 9, 2476, 9, Rahad R., near Medani (B.N.), Apr., 1924, W.W.B.
*S.G.M. 3162, 9, Talodi (N.M.), Jan., 1926, J.W.C.

310. **SUDAN RED-THROATED BEE-EATER.**

*Melittophagus bullocki frenatus* (Hartl.)

Resident—savanna—common.

**Mounted.**


**Skins.**

*S.G.M. 238, 5, 239, 5, 240, 5, Meridi (B.G.), Jan. and Feb., 1916, C.C.
*S.G.M. 1719, 9, Kajo Kaji (Mon.), Apr., 1917, J.H.M.
*S.G.M. 2943, 9, 2944, 9, 2945, 5, Simsimia (Mon.), Jan., 1925, H.H.K.

311. **WHITE-NILE SWALLOW-TAILED BEE-EATER.**

*Dicrocercus hirurdineus heuglini* Neum.

Resident—savanna—not common.

**Mounted.**


**Skins.**

*S.G.M. 246, 5, Yambio (B.G.), Mar., 1916, C.C.
*S.G.M. 247, 5, Yei (Mon.), Nov., 1915, C.C.
*S.G.M. 1721, 5, Rudu (Mon.), Mar., 1917, J.H.M.
Family BUCEROTIDÆ

KEY TO SPECIES.

1. Size large, wing over 20 ins. ... Bucorvus abyssinicus, 315.
2. Size medium, wing 13-15 ins. ... Bycanistes subcilindricus, 312.
3. Size small, wing under 10 ins. ... 2

2. Bill entirely red; throat white; smaller, wing under 7.7 ins. ... Lophoceros erythrorhynchus, 314.
3. Bill not, or only partly, red; throat brown; larger, wing over 7.7 ins. ... Lophoceros nasutus, 313.

312. BLACK-AND-WHITE CASQUED HORNBILL.
Bycanistes subcilindricus (Scl.)
Recorded in extreme south.

313a. GREY HORNBILL.
Lophoceros nasutus nasutus (Linn.)
Resident—savannacommon.

Skins.
*S.G.M. 771, c, Wau (B.G.), July-Aug., 1916, C.C.
*S.G.M. 3173, c, 3174, c, 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, c, 1198, c, Shendi (Ber.), May, 1913, A.L.B. (A.L.B.).

Skins.
*S.G.M. 1526, c, Torit (Mon.), 1918, J.H.R.Y. (R.C.).
*S.G.M. 1684, c, Rudu (Mon.), Feb., 1917, J.H.M.
*S.G.M. 1683, c, Abba Is. (W.N.), Aug., 1919, J.S.H.
*S.G.M. 2169, c, ?, Sherkela (Kor.), Jan., 1923, R.G.A.
*S.G.M. 2420, c, 2421, c, Bahad River, near Medani (B.N.), Dec., 1923, W.W.B.
*S.G.M. 2480, c, 2477, c, 3273, c, Rahad R., near Medani (B.N.), Jan-Apr., 1924, W.W.B.

314. RED-BEAKED HORNBILL.
Lophoceros erythrorhynchus erythrorhynchus (Temm.)
Resident—savana and arid (acacia-forest)—abundant.

Mounted.
*S.G.M. 1526, c, Torit (Mon.), 1918, J.H.R.Y. (R.C.).

Skins.
*S.G.M. 1684, c, Rudu (Mon.), Feb., 1917, J.H.M.
*S.G.M. 1683, c, Abba Is. (W.N.), Aug., 1919, J.S.H.
*S.G.M. 2169, c, ?, Sherkela (Kor.), Jan., 1923, R.G.A.
*S.G.M. 2420, c, 2421, c, Rahad River, near Medani (B.N.), Dec., 1923, W.W.B.
*S.G.M. 2480, c, 2477, c, 3273, c, Rahad R., near Medani (B.N.), Jan-Apr., 1924, W.W.B.

†—Intermediate L. n. nasutus x forskalii.
‡—Intermediate L. n. forskalii > nasutus.
315. **ABYSSINIAN GROUND-HORNBILL.**

*Bucorvus abyssinicus* (Bodd.)

Resident—savanna—fairly common.

---

Family **UPUPIDÆ.**

316a. **EUROPEAN HOOPOE.**

*Upupa epops epops* Linn.

Spring and autumn passage migrant—common.

**Mounted.**


**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, ♂, Kitiab (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—savanna and arid (acacia-forest)—common.

**Skins.**

S.G.M. 2627, ♂, Zeidab (Ber.), Aug., 1924, W.W.B.
S.G.M. 2633, ♂, T.E., 2634, ♂, T.E., 2635, ♂, 2636, ♂, Kitiab (Ber.), Nov., 1924, W.W.B.

Family **PHÆNICULIDÆ.**

**KEY TO SPECIES.**

1. {Bill strongly curved, yellow ... ... *Rhinopomastus minor*, 319.
   1. {Bill slightly curved, red or black ... ... ... ... 2
   2. {Larger, wing over 4.5 ins.; bill red in adult ... ... ... ... *Phoeniculus purpureus*, 317.
   3. {Smaller, wing under 4.5 ins.; bill black *Scopelus aterrimus*, 318.

317. **NILE KAKELAAR.**

*Phoeniculus purpureus niloticus* (Neum.)

Resident—savanna—common.

**Mounted.**


**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.

*ScopE;us aterrimus enimi* Neum.

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

**Mounted.**


**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* (Desil.)

Resident—savana—not common.

**Mounted.**


**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.**


**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

101
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.
8. Tail about half the length of wing:
   size larger, wing over 5.0 ins. ... ... ... ... Carine noctua, 326.
9. Larger, wing over 6.5 ins. ... ... Otus leucotis, 325.
   Smaller, wing under 6.5 ins. ... ... 9
10. 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.

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.

323b. EASTERN SCOPS-OWL.
   Otus scops pulchellus (Pall.)
   Winter visitor—throughout—fairly common.
   Skins.
   *S.G.M. 2850, ♂, Kitiab (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—savanna—common.

325. **WHITE-FACED SCOPS-OWL.**

*Otus leucotis leucotis* (Temm.)
Resident—savanna and arid (acacia-forest)—fairly common.

**Mounted.**

326. **RED SEA LITTLE OWL.**

*Carine noctua spilogaster* (Heugl.)
Resident—arid (Red Sea Province)—common.

**Mounted.**

327. **PEARL-SPOTTED OWLET.**

*Glaucidium perlatum* (Vieill.)
Resident—savanna—very common.

**Skins.**
*S.G.M. 1550, ♀, Ikoto (Mon.), Feb., 1918, J.H.R.Y.
S.G.M. 3191, ♀, 3192, ♀, Tsloidi (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—savanna 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—savanna—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  *Scotornia climacurus*, 342.
   - Tail square or rounded, central feathers never more than 1.0 ins. longer than outer ones ...
   - Outer tail-feathers tipped with white ...
   - Outer tail-feathers not tipped with white ...
   - Wing over 7.0 ins. ...
   - Wing under 7.0 ins. ...
   - Plumage golden buff ...
   - Plumage grey or blackish brown ...
   - Upper parts with conspicuous black streaks, spots or mottlings ...
   - A distinct rufous collar on hind neck; outer web of outer tail-feathers not white ...
   - No collar on hind neck; outer web of outer tail-feathers white ...
   - A white, or buffish, bar across both webs of outer primaries; plumage golden ...
   - White confined to inner edge of inner webs of outer primaries; plumage sandy buff ...
   - Top of head grey streaked with black Caprimulgus europæus, ♂, 331.
   - Top of head dark brown, vermiculated and mottled with pale rufous and black; ninth primary greatly elongated in male ...
   - A rufous collar on hind neck ...
   - No collar on hind neck ...

2. Scotornia climacurus, 342.
Wing under 6.3 ins.; ninth primary never elongated ... ... ... *Caprimulgus rufigena*, ♀, 332.

14. 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.**


**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 unwini* Hume.

Spring and autumn passage migrant—common.

**Skins.**

*S.G.M. 216, ♀, Letti basin (Don.), Nov., 1920, H.H.K.
S.G.M. 2641, ♀, Gendetta (Ber.), Oct., 1924, W.W.B.
S.G.M. 2642, ♀, Kitiab (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.

105
333b. DEAD SEA NIGHTJAR.

*Caprimulgus nubicus tamaricis* Tristr.
Resident—Red Sea coast (scrub)—fairly common.

334. ABYSSINIAN FRECKLED NIGHTJAR.

*Caprimulgus trimaculatus trustigna* Rüpp.
Resident—savana—fairly common.

Mounted.
Skins.
S.G.M. 2934, ♂, Rajaf (Mon.), Jan., 1925, H.H.K.

335. PLAIN NIGHTJAR.

*Caprimulgus inornatus* Heugl.
Resident—savana—very common.

Mounted.
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.

337a. EGYPTIAN NIGHTJAR.

*Caprimulgus aegyptius aegyptius* Licht.
Winter visitor—throughout—common.

Mounted.
Skins.
*S.G.M. 2643, ♀, Gendettu (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.
339. **HOUY’S NIGHTJAR.**

*Caprimulgus houyi* Neum.

Summer visitor—Darfur—fairly common.

340. **STANDARD-WING NIGHTJAR.**

*Macrotiperyx longipennis* (Shaw.)

Resident—savana (rivers)—common.

Mounted.


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.


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 clinitacurus* (Vieill.)

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

Mounted.


Skins.

*S.G.M. 1737, ♂, 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.C.*

*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. 2903, ♂, Wad Medani (B.N.), June, 1924, W.W.B.

S.G.M. 2844, ♂, Gendettu (Ber.), Oct., 1924, W.W.B.
Sub-Order CYPSELI.

Family MICROPODIDÆ.

KEY TO SPECIES.†

1. 
   
   \[ \begin{align*}
   \text{Larger, wing over 6.3 ins.} & \quad \ldots \quad \ldots \quad 2 \\
   \text{Smaller, wing under 6.3 ins.} & \quad \ldots \quad \ldots \quad 5
   \end{align*} \]

2. 
   
   \[ \begin{align*}
   \text{Under parts white} & \quad \ldots \quad \ldots \quad \text{Micropus melba, 345.} \\
   \text{Under parts not white} & \quad \ldots \quad \ldots \quad 3
   \end{align*} \]

3. 
   
   \[ \begin{align*}
   \text{Wing over 7.1 ins.} & \quad \ldots \quad \ldots \quad \text{Micropus equatorialis, 346.} \\
   \text{Wing under 7.1 ins.} & \quad \ldots \quad \ldots \quad 4
   \end{align*} \]

4. 
   
   \[ \begin{align*}
   \text{Plumage brown with a strong bottle-green tinge; first primary shorter than second (not invariable)} & \quad \ldots \quad \ldots \quad \text{Micropus apus, 343.} \\
   \text{Plumage browny grey, with little or no gloss; first primary equal to, or longer than, second (occasionally shorter)} & \quad \ldots \quad \ldots \quad \text{Micropus murinus, 344.}
   \end{align*} \]

5. 
   
   \[ \begin{align*}
   \text{Tail deeply forked} & \quad \ldots \quad \ldots \quad 6 \\
   \text{Tail square} & \quad \ldots \quad \ldots \quad \text{Micropus affinis, 347.}
   \end{align*} \]

6. 
   
   \[ \begin{align*}
   \text{Wing over 5.5 ins., all four toes directed forwards at equal intervals} & \quad \ldots \quad \ldots \quad 7 \\
   \text{Wing under 5.5 ins., toes in pairs, the first and second pointing inwards, the third and fourth outwards} & \quad \ldots \quad \ldots \quad \text{Tachyypetes parvus, 350.}
   \end{align*} \]

7. 
   
   \[ \begin{align*}
   \text{Difference in length between outer and middle tail-feathers 1.2 ins. or more} & \quad \ldots \quad \ldots \quad \text{Micropus caffer, 348.} \\
   \text{Difference between outer and middle tail-feathers less than 0.8 ins.} & \quad \ldots \quad \ldots \quad \text{Micropus korus, 349.}
   \end{align*} \]

343a. COMMON SWIFT.

\[ \text{Micropus apus apus (Linn.)} \]

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.

\[ \text{Micropus apus kollibayi (Tschusi).} \]

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-BELLED OR ALPINE SWIFT.**

*Micropus melba melba* (Linn.)

Spring and autumn passage migrant, some wintering, a few summering but not breeding—fairly common.

**MOUNTED.**


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 abessynicus* (Streubel).

Resident—savanna (hills)—common.

348. **ABYSSINIAN WHITE-RUMPED SWIFT.**

*Micropus caffer streubelii* (Hartl.)

Resident—savanna—not common.

**MOUNTED.**


349. **HORUS SWIFT.**

*Micropus horus* (Heugl.)

Resident—savanna—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 dóm 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, ♀, Kitiab (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.**

\[
\begin{align*}
\text{Nape blue} & \quad \ldots \quad \ldots \quad \ldots \quad \text{Colius macrourus, 352.} \\
\text{Nape same colour as upper parts} & \quad \ldots \quad \ldots \quad \ldots \quad \text{Colius striatus, 351.}
\end{align*}
\]

351a. **UELE SPECKLED MOUSEBIRD.**

*Colius striatus leucophthalmus* Chapin.

Resident—savanna IV—fairly common.

**Skins.**

*S.G.M. 260, ♀, Meridi (B.G.), Feb., 1916, O.O.*

351b. **UPPER NILE SPECKLED MOUSEBIRD.**

*Colius striatus erlangeri* Zedl.

Resident—savanna III—common.

**Skins.**

*S.G.M. 2096, ♂, 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—savanna II—common.

110
352a. BLUE-NAPED COLEY OR MOUSEBIRD.

*Colius macrourus macrourus* (Linn.)
Resident—throughout—common.

**MOUNTED.**

**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—savanna 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—savanna II & III—not common.

Sub-Order PICI.

**Family CAPITONIDÆ.**

**KEY TO SPECIES.**

1. \{ Size larger, wing over 2.5 ins.; forehead 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 ... ... ... *Erythrobuco 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 guisoabalti*, 355.
   \{ Rest of under parts whitish ... ... ... *Lybius vieilii*, 356.
   \{ Rest of under parts red ... ... ... *Lybius bidentatus*, 358.
5. \( \begin{array}{lll}
\text{Head white} & \ldots & \ldots & \ldots & \text{Lybius leucocephalus}, 357. \\
\text{Head not white} & \ldots & \ldots & \ldots & \text{Tricholoma diadematum}, 359.
\end{array} \)

6. \( \begin{array}{lll}
\text{Throat and breast clear sulphur yellow,} & \ldots & \ldots & \ldots & \text{Trachyphonus marginatus}, 361. \\
\text{or with a single triangular black patch} & \ldots & \ldots & \ldots & \text{Trachyphonus dernaudii}, 362.
\end{array} \)

354. BLACK-BREASTED BARBET.

*Erythromuco rolleti* (Defil.)

Resident—savana—common.

Mounted.


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 guifobalito* 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. 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—savanna III and IV—fairly common.

**Mounted.**


**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, ♂, Kajo Kaji (B.G.), Mar., 1916, C.C.

358. **UGANDA DOUBLE-TOOTHED BARBET.**

*Lybius bidentatus equatorialis* (Shelley).

Resident—savanna IV—not common.

**Skins.**

*S.O.M. 182, ♂, 183, ♀, Yambio (B.G.), Mar., 1916, C.C.

359. **RED-FRONTED BARBET.**

*Tricholema diadematum diadematum* (Heugl.)

Resident—savanna III—not common.

**Mounted.**


**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—savanna I, III and IV—common.

**Mounted.**


**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. Selater and M. Praed, Ibis, 1919, p. 635.
‡—Intermediate *P. c. schubotzi* > zedlitzi.
360b. SENNA Yellow-Fronted Tinker-Bird.

*Pogoniulus chrysoconus zedlitzi* (Neum.)

Resident—savanna 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.


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, ♀, 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 darnaudi darnaudi* (Prév. and Des Murs.)

Resident—savanna III—not common.

Mounted.


Skins.

S.G.M. 2950, ♀, Rejaf (Mon.), Jan., 1925, H.H.K.

*S.G.M. 1738, ♂, Mongalla, Aug., 1919, J.S.H.

Family *Indicatoridae*.

**Key to Species.**

1. 
   \[\text{Tail of ten feathers; bill broader than deep} \quad \text{...} \quad \text{...} \quad \text{...} \quad \text{Prodoliscus regulus, 366.}\]
   \[\text{Tail of twelve feathers; bill deeper than broad} \quad \text{...} \quad \text{...} \quad \text{...} \quad 2\]

2. 
   \[\text{Middle of upper tail-coverts white or partly white} \quad \text{...} \quad \text{...} \quad \text{...} \quad \text{Indicator indicator, 363.}\]
   \[\text{No white in upper tail-coverts} \quad \text{...} \quad \text{...} \quad \text{...} \quad 3\]

3. 
   \[\text{Wing under 3.2 ins.} \quad \text{...} \quad \text{...} \quad \text{...} \quad \text{Indicator exilis, 365.}\]
   \[\text{Wing over 3.2 ins.} \quad \text{...} \quad \text{...} \quad \text{...} \quad \text{Indicator minor, 364.}\]

†—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.*

114
363. BLACK-THROATED HONEY-GUIDE.

*Indicator indicator* (Sparrm.)
Resident—savanna—fairly common.

Mounted,

 skins.
*S.G.M. 177, ♂, 178, ♀, Yei (Mon.), Dec., 1915, C.C.

364a. ABYSSINIAN LESSER HONEY-GUIDE.

*Indicator minor diadematus* Rupp.
Resident—savanna II and III—not common.

364b. ADAMAWA LESSER HONEY-GUIDE.

*Indicator minor riggenbachi* Zedl.
Resident—savanna I—not common.

365. UGANDA LEAST HONEY-GUIDE.

*Indicator exilis pygmaeus* Reichw.
Resident—savanna IV—not common.

366. WAHLBERG’S HONEY-GUIDE.

*Prodotiscus regulus regulus* Sund.
Resident—savanna II—fairly common.

Family **PICIDÆ.**

**Key to Species.**

1. (Tail-feathers with their shafts stiffened
   and spiny at the tip
   Tail-feathers soft and rounded at the
   tip
   ... ... ... ... ... 2

2. (Size larger, wing over 4.0 ins...
   Size smaller, wing under 4.0 ins...
   ... ... ... ... ... 3

3. (Under parts spotted or streaked with
   black
   Under parts not spotted or streaked
   with black
   ... ... ... ... ... 4

4. (Upper parts dusky or yellowish olive
   spotted and barred with white or
   yellowish
   Upper parts yellowish olive spotted,
   but not barred with white or
   yellowish
   ... ... ... ... ... 5

5. (Under parts spotted with black
   Under parts streaked with black
   ... Campethera punctuligera, 368.
   Campethera nubica, 367.
   Campethera abingoni, 369.

115
6. Shafts of tail-feathers dark brown or black above ... ... ... ... Mesopicos goerta, 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 pocilolemus, 372.
   Breast streaked ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... Dendropicos fufresnayi, 370.

10. Throat and breast yellowish buff, narrowly barred with black ... Jynx torquilla, 376.

367. NUBIAN WOODPECKER.
   Campethera nubica nubica (Bodd.)
   Resident—savanna and arid (acacia-forest)—common.

368. GHAZAL FINE-SPOTTED WOODPECKER.
   Campethera punctuligera balia (Heugl.)
   Resident—savanna I and IV—fairly common.

369. WEST AFRICAN GOLDEN-TAILED WOODPECKER.
   Campethera abingoni chrysurus (Swains.)
   Resident—savanna IV—not common.

370. ABYSSINIAN GREEN-BACKED CARDINAL WOODPECKER.
   Dendropicos fufresnayi lepidus (Cab. and Heine).
   Resident—savanna III and IV—fairly common.

371. LITTLE GREY WOODPECKER.
   Dendropicos elachus Oberh.
   Resident—arid, west (acacia-forest)—not common.
372. **UGANDA SPOTTED WOODPECKER.**

*Dendropicos pæcilolæmus* 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.*


*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.**

*Thripia namaqua schoensis* (Rüpp.)

Resident—savana IV—not common.

375a. **WEST AFRICAN GREY WOODPECKER.**

*Mesopicos goertie poicephalus* (Swains.)

Resident—savana I, III and IV—very common.

*Mounted.*


*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—savanna II—common.

376. EUROPEAN WRYNECK.

*Jynx torquilla torquilla* Linn.

Winter visitor—throughout—fairly common.

**Mounted.**


**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 Hanoieit, P. Sudan (R.S.), Apr., 1926, H.B.J.

377. BANDED-THROATED WRYNECK.

*Jynx pulchricollis* Hartl.

Only known from types—Mongalla Province.
## INDEX TO FAMILIES

<table>
<thead>
<tr>
<th>Family</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypiida (Vultures)</td>
<td>33</td>
</tr>
<tr>
<td>Alcedinidae (Kingfishers)</td>
<td>93</td>
</tr>
<tr>
<td>Anatidae (Ducks and Geese)</td>
<td>27</td>
</tr>
<tr>
<td>Anhingidae (Darters)</td>
<td>18</td>
</tr>
<tr>
<td>Ardeidae (Heron, Egrets, Bitterns)</td>
<td>19</td>
</tr>
<tr>
<td>Balaenicipitidae (Shoebill)</td>
<td>23</td>
</tr>
<tr>
<td>Balearicinae (Cranes)</td>
<td>54</td>
</tr>
<tr>
<td>Bucerotidae (Hornbills)</td>
<td>99</td>
</tr>
<tr>
<td>Burhinidae (Stone-curlies)</td>
<td>70</td>
</tr>
<tr>
<td>Capitonidae (Barbets)</td>
<td>111</td>
</tr>
<tr>
<td>Caprimulgidae (Nightjars)</td>
<td>104</td>
</tr>
<tr>
<td>Charadriidae (Plovers)</td>
<td>57</td>
</tr>
<tr>
<td>Geocidiidae (Storks)</td>
<td>24</td>
</tr>
<tr>
<td>Colidae (Mousebirds)</td>
<td>110</td>
</tr>
<tr>
<td>Columbidae (Pigeons and Doves)</td>
<td>79</td>
</tr>
<tr>
<td>Coraciidae (Rollers)</td>
<td>91</td>
</tr>
<tr>
<td>Ouletidae (Cuckoos)</td>
<td>84</td>
</tr>
<tr>
<td>Dromadidae (Crab-Plover)</td>
<td>70</td>
</tr>
<tr>
<td>Falconidae (Birds of Prey)</td>
<td>34</td>
</tr>
<tr>
<td>Glareolidae (Pratincoles)</td>
<td>68</td>
</tr>
<tr>
<td>Indicatoridae (Honey-Guides)</td>
<td>114</td>
</tr>
<tr>
<td>Jacanidae (Jacanas)</td>
<td>54</td>
</tr>
<tr>
<td>Laridae (Gulls and Terns)</td>
<td>71</td>
</tr>
<tr>
<td>Meropidae (Bee-eaters)</td>
<td>95</td>
</tr>
<tr>
<td>Micropodidae (Swifts)</td>
<td>108</td>
</tr>
<tr>
<td>Musophagidae (Plantain-eaters)</td>
<td>88</td>
</tr>
<tr>
<td>Otididae (Bustards)</td>
<td>55</td>
</tr>
<tr>
<td>Pandionidae (Osprey)</td>
<td>47</td>
</tr>
<tr>
<td>Pelecanidae (Pelicans)</td>
<td>18</td>
</tr>
</tbody>
</table>

119
<table>
<thead>
<tr>
<th>Family</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phalacoracidae (Cormorants)</td>
<td>18</td>
</tr>
<tr>
<td>Phasianidae (Game-birds)</td>
<td>48</td>
</tr>
<tr>
<td>Phaethontidae (Tropic-birds)</td>
<td>18</td>
</tr>
<tr>
<td>Phoenicopteridae (Flamingo)</td>
<td>27</td>
</tr>
<tr>
<td>Phoeniculidae (Wood-Hoopoes)</td>
<td>100</td>
</tr>
<tr>
<td>Picidae (Woodpeckers)</td>
<td>115</td>
</tr>
<tr>
<td>Plegadidae (Spoonbills and Ibises)</td>
<td>25</td>
</tr>
<tr>
<td>Podicipedidae (Grebes)</td>
<td>17</td>
</tr>
<tr>
<td>Psittacidae (Parrots)</td>
<td>90</td>
</tr>
<tr>
<td>Pteroclididae (Sandgrouse)</td>
<td>77</td>
</tr>
<tr>
<td>Rallidae (Rails)</td>
<td>52</td>
</tr>
<tr>
<td>Recurvirostridae (Avocet and Stilt)</td>
<td>61</td>
</tr>
<tr>
<td>Sagittariidae (Secretary-Bird)</td>
<td>33</td>
</tr>
<tr>
<td>Scolopacidae (Snipes, Sandpipers and Curlew)</td>
<td>62</td>
</tr>
<tr>
<td>Scopidae (Hammerhead)</td>
<td>23</td>
</tr>
<tr>
<td>Strigidae (Owls)</td>
<td>101</td>
</tr>
<tr>
<td>Struthionidae (Ostrich)</td>
<td>17</td>
</tr>
<tr>
<td>Sulidae (Booby)</td>
<td>18</td>
</tr>
<tr>
<td>Trogonidae (Trogons)</td>
<td>111</td>
</tr>
<tr>
<td>Turnicidae (Button-quails)</td>
<td>48</td>
</tr>
<tr>
<td>Tytonidae (Barn-Owls)</td>
<td>101</td>
</tr>
<tr>
<td>Upupidae (Hoopoes)</td>
<td>100</td>
</tr>
</tbody>
</table>