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**NOTES ON THE GAME BIRDS OF  
KENYA AND UGANDA**









J FRANCOLINUS SHEILEYI EIGONENSIS

# NOTES ON THE GAME BIRDS OF KENYA AND UGANDA

*(Including the Sand-Grouse, Pigeons,  
Snipe, Bustards, Geese, and Ducks)*

BY

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*FULLY ILLUSTRATED IN COLOUR*



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**TO  
MY WIFE**



## PREFACE

AFTER the issue of Volume V of Shelley's "Birds of Africa," and the decision to discontinue the publication of any further volumes, the hopes of British Ornithologists, and particularly those workers in the field, like myself and others, who cannot read and understand German, received a severe set-back.

With the exception of a few papers published from time to time in the *Proceedings* of the Zoological Society, the *Ibis*, *Novitates Zoologicæ*, and by American and Swedish<sup>1</sup> Institutions, some incomplete, and many little more than lists, in which the same bird frequently recurs, though under a different name, there is no publication on Kenya or Uganda birds, in book form, to refer to for help, except Professor Reichenow's great work, "Die Vögel Afrikas," that embraces all the birds of that vast continent.

In the belief, and hope, that the publication of these "Notes on the Game Birds of Kenya Colony and Uganda," including the Sand-grouse, Bustards, Geese,

<sup>1</sup> I should like to take this opportunity of thanking both Professor Lönnberg and Dr. Granvik for publishing in English their interesting and instructive reports on the birds they obtained in British territory, on behalf of the Swedish National Museum; a compliment that all my countrymen interested in the subject must greatly appreciate.



Ducks, Snipe, and Pigeons, may supply a want, and prove helpful to residents and visiting sportsmen, I wish it to be understood that my aim is primarily to enable those on the spot to identify a bird when obtained or to assist in obtaining it.

Within the last twenty years or so, nomenclature in Ornithology has been practically revolutionised. Without attempting to enter into the why and wherefore, it is enough to state that when most of my notes were jotted down, I was under the impression that I knew the names of a large percentage of the birds found in the two territories fairly well, but up till quite recently so many changes have been made that to forget familiar and old-established names, and try to remember new ones, or rather older ones according to the rules of priority, is almost tantamount to beginning all over again.

The task, moreover, is rendered none the less difficult by the adoption of trinomialism, an admirable system, though liable to abuse. At one time, the subdivision of species into sub-species or races became almost a craze, and certainly was most confusing.

However, we now have Mr. W. L. Sclater's "*Systema Avium Ethiopicarum*," the latest work on the subject, and it must be, or ought to be, a matter of very great satisfaction that we have for our guidance an up-to-date list of African birds that is approved by a Committee of British and American Ornithologists of world-wide repute.

The question, "What is a sub-species?" was dis-

cussed a short while ago in the *Ibis* by various members of the B.O.U., and I have selected the following definition by Mr. E. C. Stuart Baker, O.B.E., as the simplest and most concise: "A sub-species is a geographical race or variation, differing in some respect from the form first described as a species, yet linked with it by other intermediate forms found in intervening areas. It is essential, however, that the variation before it is named shall be proved to be stable within a certain definite area . . . and that a sub-species become a full species when Nature, in the course of Evolution, has eliminated the intervening forms."

The publication of this volume in its present form is being undertaken at the suggestion, and in compliance with the wishes, of many friends who are admittedly more interested in birds that afford sport and can go into "the pot" than those of great beauty or scientific interest.

The families dealt with form only a small portion of the avifauna of the two territories, but later on I hope to be able to deal, in a more comprehensive form, with all the birds of Kenya and Uganda.

In the matter of Classification, Dr. Sharpe's "Hand List" has been adhered to, as I adopted it at the time the catalogue of my own collection was made.

In using such expressions as "confined to the forests of Uganda," it is not to be inferred that the bird does not range into neighbouring territory other than the Colony. Again, when recording the breeding habits, in using the words "it breeds between April and June,

and again in October or November," it is not suggested that the same pair of birds bring off two broods during the year.

The descriptions of the birds, many of them slightly abbreviated, are mostly taken from the "Catalogue of Birds in the British Museum," the "Birds of South Africa," by Layard and Sharpe, and Stark and Sclater, while others, and particularly the local races, are taken from the *Ibis*, the *Bulletin* of the B.O.U., and the Smithsonian Miscellaneous Collections.

For permission to reproduce the coloured plates I am greatly indebted, and wish to express my thanks to the Trustees of the Natural History Museum, the Council of the Zoological Society, and the Committee of the British Ornithologists' Union, and specially to thank Sir Sydney Harmer, K.B.E., F.R.S., Director of the Museum, Dr. Chalmers Mitchell, F.R.S., and Mr. W. L. Sclater, editor of the *Ibis*, for their kind assistance in obtaining it.

F. J. J.

London,  
October, 1925.

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# NOTES ON THE GAME BIRDS OF KENYA AND UGANDA

## PHASIANIDÆ

*Francolinus coqui coqui*.

COQUI FRANCOLIN.

*Francolinus coqui* Smith.

Sharpe's Hand List, Vol. I. p. 23.

Reichenow's Vögel Afrikas, Vol. I. p. 492.

*Francolinus coqui coqui* Smith.

Praed's African Francolins, *Ibis*, 1922, p. 107.

Sclater's Systema Avium Ethiop., Part I. p. 79.

*Description: Male.* Top of the head and ear-coverts chestnut-brown; rest of the head and nape rufous buff, paler on the chin and throat, in some specimens white; neck, chest, and rest of under parts white, shading into buff on the abdomen, flanks, and under tail-coverts, and widely barred with black; upper parts a mixture of chestnut and buff with wide bars of black or dark grey, interrupted by wide buff shaft-stripes; primaries greyish-black; tail rufous-buff barred with greyish-black; iris orange-red; bill blackish-brown, gape and base of lower mandible yellow; feet yellow-ochre. Length, 304–314 mm.; wing, 137–145 (Praed).

*Female.* Differs from the male in having a black streak above the eye and passing down the side of neck; a second black line, commencing in front of the eye, passes along the side of the throat and completely encircles it; neck and chest dull chestnut mixed with grey and with white shafts; rest of under parts grey with the bars and markings less regular. Wing, 126-138 mm. (Praed).

*Distribution.* Kenya.

*Recorded Localities.* Duruma, M'bungu, Gulu Gulu, Maji Chumvi. Upper Tana River (G. L. Harrison). Ithanga Hills (Praed). Kisigau (Percival). Near Mombasa (Hildebrandt).

*Notes.* The Coqui Francolin is found in the coast regions between the Sabaki River, and the frontier of Tanganyika Territory, and ranges inland as far west as Kisigau in Teita. Further north it reappears in the Ithanga Hills, and on the upper Tana.<sup>1</sup> It is the smallest of the Francolins found in East Central Africa. It frequents open country sparsely dotted with small acacia and other trees, and low scrub; and it would, no doubt, be more plentiful than it is were it not beset by so many enemies, grass fires being perhaps the worst. These scourges lick up and destroy everything before them, and they, unfortunately, so often occur just at the time when this, and other Francolins, such

<sup>1</sup> The race found in the Colony is much smaller than the typical race, and has much more heavily barred under parts. The wing measurements of an adult male are only 124 mm. There would appear to be some justification for regarding it as a well-marked race.

as *F. a. uluensis* and *c. hubbardi*, are breeding. It is usually found, except during the breeding season, in small coveys of four to six in number, and being a sprightly little bird and very quick on the wing, affords very good sport. It is, however, a terrible squatter, and is rarely flushed, except by the merest chance, without the aid of three or four beaters in fairly close order on each side of the gun. Its call is high-pitched but not unmusical; it is heard in the early mornings and late evenings, but often throughout the day in dull weather, and almost invariably after a shower of rain. It is, in fact, more often heard than seen. When flushed, it rises with a sharp and shrill squeal, and when in a covey the birds scatter in all directions. It is at all times a close squatter, and particularly so when the grass is wet with dew, or after rain. During the heat of the day it is sleepy and dull, and will almost allow itself to be trodden on. In the afternoon, after four o'clock, it is more alert and rises better, and is easily marked down in the open country which it frequents; this is undoubtedly the best time of the day to look for it. It is not yet known when it breeds, but the eggs of the typical race in South Africa are "a very pale greenish-white, somewhat conical in shape, and the shell is exceedingly thick and hard. They measure 1.5 × 1.2 inches" (Stark and Sclater).

*Francolinus coqui* (Race 2).

## UGANDA COQUI FRANCOLIN.

*Francolinus coqui* Smith.

Sharpe's Hand List, Vol. I. p. 23.

Reichenow's Vögel Afrikas, Vol. I. p. 492.

*Francolinus coqui*, subsp. 2.Praed's African Francolins, *Ibis*, 1922, p. 108.*Francolinus coqui coqui* Smith.

Sclater's Systema Avium Ethiop., Part I. p. 79.

*Description*: Similar to the coast race, but with the throat white and not buff. Length, 266–318 mm. Weight, 9–10 oz. Wing, male, 137–145; female, 126–138 mm. (Praed).<sup>1</sup>

*Distribution*. Uganda. Confined to the southern border of the kingdom, and Ankole.

*Recorded Localities*. Kisassa. Mulema, Buddu (southern), Koki, Mbarara (Doggett).

*Notes*. In Ankole this bird appears to be very local, and to confine itself to the open grassy hillsides freely dotted with ant-heaps and bushes. In all other respects it is similar to the coast race. Its shrill call-notes are very distinctive from those of *F. l. mulemæ*, found in the same localities, and they should always be used as a guide to its exact whereabouts. One evening, at Kisassa, three coveys were thereby located, and flushed

<sup>1</sup> The differences in size and markings between the Ankole birds and the typical race from South Africa appear to me to be much less pronounced than those between the latter and the birds inhabiting the coast littoral of the Colony.





II FRANKLIN'S COQUI HUBBARDI

in less than an hour. One of these had already been passed by, and another would have been if one of the birds had not again called, while the third happened, by chance, to be straight ahead; but without the call as a guide, in the last case, we might quite possibly have diverted to the right or left of the covey.

*Francolinus coqui hubbardi.*

HUBBARD'S FRANCOLIN.

Plate II.

*Francolinus hubbardi* O. Grant.

Sharpe's Hand List, Vol. I. p. 23.

Reichenow's Vögel Afrikas, Vol. I. p. 495.

*Francolinus coqui hubbardi* O. Grant.

Praed's African Francolins, *Ibis*, 1922, p. 108.

Sclater's Systema Avium Ethiop., Part I. p. 79.

*Description: Male.* Top of head dark brown, with greyish edges to the feathers; sides of face, neck, and throat buff; breast and collar round the back of the neck white deeply barred with black; under parts very pale buff; under tail-coverts darker; upper parts a mixture of very dark brown and grey with buffy-white shafts to the feathers, and irregularly barred with dark buff; tail dark brown barred with dark buff; iris brown on hazel; bill blackish-brown, gape and base of lower mandible greenish-yellow; feet yellow with joints of toes dusky. Length, 295–317 mm.; wing, 140–153 mm. Weight, 11 oz.

*Female.* Much like the female of *F. c. coqui*, but



the chest is greyish, and the rest of the underparts are whitish-buff with narrow black bars on the upper part of the breast. Wing, 137-141 mm.

*Distribution.* Kenya.

*Recorded Localities.* Kedong Valley, Naivasha, Elmenteita, Nakuru Plains, Molo River, Eldoma Ravine, Nyando Valley west of Mohoroni. Mua Hills, Kitui, and Fort Hall (Woosnam). Kijabi, Suswa, Amala River, Lengototo (Cosens). Nakuru and Elmenteita (van Someren). Machakós (Percival).

*Notes.* Hubbard's Francolin was discovered by, and named after, the late Rev. E. H. Hubbard, of the Church Missionary Society, a good sportsman whose untimely death was due to a deplorable gun accident. He obtained the type at Nassa on Speke Gulf, a locality that would appear to cause a distinct break in the range of the type-race between the coast and far-away Ankole.<sup>1</sup> It is a lover of open country, and is found in small coveys of four to six on rolling short grassy plains, or on their fringe dotted with small trees and open bush. Like many Francolins, it relies greatly on its protective colouring to escape detection, and seeks safety mostly by running or squatting; and it is an

<sup>1</sup> This, coupled with the fact that the typical race is recorded from the Upper Tama by Mr. G. L. Harrison, from the Ithanga Hills by Mr. Praed, and that Mr. Woosnam obtained examples of this bird at Fort Hall, and the Tana River close by (and somewhere about the same spot as Mr. Harrison obtained his bird), and that all were within a radius of ten miles of Fort Hall, suggests that this bird should be regarded as a species, and not a race of *coqui*.

adept at both, perhaps more particularly the latter. Its call is shrill, but not unpleasing, and is usually heard in the early morning and late afternoon, but very often it is so difficult to locate the position from which it comes that the bird appears to have ventriloquial powers. In this connection, on one occasion when out on the Nakuru plains with the late Sir Clement Hill (at that time Head of the African Department of the Foreign Office) one of these birds began its call apparently 100 yards away. As we both thought we located the exact spot, we advanced on it with gun-bearers in line; but nothing moved, and we had just returned to the footpath and were exchanging shot guns for rifles, when the call began again, and from the same place. Twice more did we go after that bird, and quarter the ground so carefully that I believe it is impossible for it to have been there. Finally we gave it up, and were returning to the footpath when the call was restarted, followed immediately by guffaws of laughter from the gun-bearers, in which we heartily joined, Sir Clement drily remarking, "Really, Jackson, I believe the confounded bird is a ventriloquist," and on that occasion it certainly convinced us that it was. If surprised on open ground it will sneak off in a crouching position to the nearest patch of cover, and there squat.

It was often seen on footpaths, and on the Nakuru-Ravine cart-road, running along for considerable distances and well within gunshot, and only when pressed would it creep into the grass alongside, and skulk within

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a few feet, rather than take wing. When it rises it does so with a loud squeal, and when in a covey the birds scatter in all directions, making it difficult to mark down more than one or two of them. To flush it a second time, without a dog, or a few beaters in close formation, is still more difficult.

Dr. V. G. L. van Someren, writing in the *Ibis* for April, 1916, p. 218, states: "This Francolin was common in the grass and acacia country (Nakuru and Elmenteita), occurring in pairs or small coveys. They were breeding in June, and young birds were caught in July and October."

On the lower slopes of Kijabi Hill, a nest containing four eggs was found in July. It was a mere scratching in the ground, in some short scrub lined with dry grass and a few leaves, and was well hidden. The eggs are plain cream colour, and measure 40-43 × 31 mm.

*Francolinus streptophorus.*

RING-NECKED FRANCOLIN.

Plate III.

*Francolinus streptophorus* O. Grant.

Sharpe's Hand List, Vol. I. p. 23.

Reichenow's Vögel Afrikas, Vol. I. p. 487.

Praed's African Francolins, *Ibis*, 1922, p. 109.

Sclater's Systema Avium Ethiop., Part I. p. 79.

*Description: Male.* Top of the head, ear-coverts, back, wings, upper tail-coverts, and tail umber-brown, the lower back, rump, and scapulars largely blotched



III FRANCOLINUS STREPTOPHORUS



with rich dark brown on one or both webs, and mostly with white shaft-stripes; stripe above the eye white; sides of the face and neck bright chestnut, with a white stripe from the eye to the ear-coverts; chin and throat white, some of the feathers tipped with chestnut; back of neck and upper chest barred with black and white, and forming a wide ring which contrasts strongly with the rest of the plumage; lower chest and rest of the under parts pale buff, the former crossed with wavy black bars, the flanks with large oblong black blotches on one or both webs of the feathers; iris hazel; bill black, with base of both mandibles yellow; feet ochreous yellow. Length, 312–332 mm.; wing, 152–161 mm.

*Female.* Differs from the male in having the back, rump, and upper tail-coverts barred with buff, and the wing-coverts spotted with the same colour. Wing, 152–158 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Fort Ternan, Mohoroni, Mt. Elgon, Mangiki, Masaka, Katonga River, Bulemezi, Buruli, Owelo, Nakasongola, Kaduka Hill, Masindi, Nimuli, Kitgum Achole. Samia Hills (Ansoerge). Kafu River (Neave).

*Notes.* The distribution of this Francolin in the colony is very local, as it has only been recorded from two districts, roughly a hundred miles apart, *i.e.* the southern foot-hills of Mt. Elgon, and the Nyando Valley between Fort Ternan and Mohoroni.

In Uganda its range is both wider and more continuous, as it extends from Mt. Elgon as far north as

the Uma river; it was heard in several places in Bulemezi and Buruli, and I feel confident that I heard it near Masaka, and certainly saw it in the Katonga valley. In one spot in Buruli this bird, *F. s. grantii* and *F. i. dybowskii*, were heard calling at the same moment.

The type, together with two other examples, was obtained at Mangiki's on the southern slopes of Mt. Elgon, in March, and ten years later it was again met with near Fort Ternan, where one was obtained, and others were seen and heard. In the Gulu and Chua districts of Uganda it is common in the undulating, open, and rather orchard-like bush-country between Kitgum and Gulu, but was always difficult to obtain owing to its being such a skulker, and also a first-class runner. In other localities it has a decided preference for stony hillsides covered with short grass and scrub. It is generally found singly or in pairs, and only in coveys of four or five after the breeding season. It is very quick on the wing, gets away without any warning squeal, and just as likely behind the gun as in front. It is, in fact, so fast that when hit, whether killed outright or only winged, it strikes the ground with such force that large quantities of feathers are nearly always scattered on the ground at the point of impact.

Its call is perhaps the most marked peculiarity about it, as it in no sense resembles the call of any other Francolin. It commences with two low but distinct notes, and ends in a drawn-out and soft piping trill; and it is exceedingly difficult to locate. Both my

collector Baraka and I were, for a long time, completely baffled by this curious call, and we quite independently of each other solved the mystery by crawling through the grass, and shooting the bird while in the act. Baraka's bird was on a small ant-heap, near Mangiki's, and mine on a stone near Fort Ternan. Out of six specimens, all males, obtained in the Gulu and Chua districts, four were stalked and shot as they sat calling on ant-heaps in the early morning. No doubt there were females in the very near vicinity.

During the same tour a hybrid between this bird and a fowl was purchased from a native in Chua; it was noticed running about in a village close to camp, with its mother and two half-grown chickens, one of which was also bought for companionship. Both reached Entebbe safely and thrived well for a month, when the hybrid died. Unfortunately, the boy in charge did not report its death until it was in an advanced state of decomposition, and most of the feathers came away in the process of skinning. The specimen, such as it is, is now in the Natural History Museum. I had, however, made the following note: "It is distinctly and literally a half-breed; the feathers of the back, shoulders, and hind neck have the white shaft-stripes of the francolin, but the longer tail of the fowl. The feet and toes are dull yellow, contrasting with pale brown of the two chickens and foster-mother. The top of the head is slightly tufted and is darker than the rest, and the tail is carried well above the line of the back when running." My reason



for believing that it is a hybrid of this bird is that one was actually shot, and the others were heard calling in the immediate vicinity of the village. There are, however, two other Francolins found in the Nile districts (*F. i. dybowskii* and *F. s. grantii*), but the former was neither heard nor seen after crossing the Asua river near Nimuli; and it can generally be accepted as a maxim that a Francolin, if resident in a locality, almost invariably proclaims its presence by its call.

It breeds in the Nyando valley in December and January, on the slopes of Mt. Elgon in March, and in the Gulu and Chua districts in April.

*Francolinus sephæna grantii.*

COLONEL GRANT'S CRESTED FRANCOLIN.

*Francolinus grantii* Hartl.

Sharpe's Hand List, Vol. I. p. 23.

Reichenow's Vögel Afrikas, Vol. I. p. 496.

*Francolinus sephæna grantii* Hartl.

Praed's African Francolins, *Ibis*, 1922, p. 111.

Sclater's Systema Avium Ethiop., Vol. I. p. 80.

*Description: Male.* Top of the head crested, dark brown with rusty-brown tips to the feathers; stripe above and below the eye, chin, and throat white; cheeks, sides of neck, and lower throat white with triangular chestnut spots; chest buff with narrower triangular chestnut spots; rest of underparts buff, finely shaded and pencilled with greyish-black except on the middle of the abdomen and vent; upper back, scapulars, and

wing-coverts chestnut, fading into grey-brown in the middle of each feather, and with a wide shaft-stripe of pale buff; primaries and secondaries brown; rump, lower back, and upper tail-coverts grey-brown; tail dark brown; iris brown; bill brownish-black; feet rosy-red. Length, 307-332 mm.; wing, 140-148 mm. Weight, 11 oz.

*Female.* Slightly smaller; and having the middle of back, scapulars, and wing-coverts covered with narrow, wavy bars of buff and lines of black. Wing, 132-145 mm. Weight, 9 oz.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Malindi, Mombasa, Duruma, Taru, Maungu, Ndara, Taveta, Doinyo Narok, Machakos, Yatta, Embu, Kitui, Baringo, Kamassia, Elgeyu, Ngobotok, Turkwel River, Kisumu, N. Uaso Nyiro, Rumuruti,<sup>1</sup> Katonga River, Buddu, Kisingo, Bulemezi Buruli, Busoa, Butiaba, Nimuli, Kitgum, Tsavo. Ithanga Hills (Praed). S. Uaso Nyiro. Mt. Moroto (Cosens). Nyeri, Kabulamaliro, Kiu, M'buyuni (van Someren). Makindu (Percival).

*Notes.* Grant's Crested Francolin, named after the great explorer and Speke's companion, is the most widely distributed, and also the most plentiful of the genus. In the two territories it ranges throughout the bush-veldt country, at altitudes mostly under 5000 feet, from the coast to the Upper Nile Valley on the west, and to the Italian-Abyssinian-Sudan frontiers

<sup>1</sup> Two birds from the N. Uaso Nyiro and Rumuruti cannot be distinguished from an example from Machako's.

on the north. A bird with such a wide range, and in no way subject to local movements, must and does vary a good deal in size, colour, and markings, and several attempts have been made recently to divide it into races. So far no two opinions agree, and those that have been published are confusing, and still leave the field-worker in doubt. This bird is the familiar *Quari* of the Swahilis, and is, or was, nowhere so plentiful as on the coast between Malindi and Freretown, the Taru Wilderness, and the Turkwel river in the vicinity of Ngobotok. It used to be quite common in the bush round Kisumu, but in such a place it is doomed to extinction, as no game bird can stand being shot at all the year round, as well as ceaseless trapping by natives, and also the destruction of its natural covert. In Uganda it is more widely distributed, but local.<sup>1</sup> It is essentially a bird of the bush-veldt, and is without exception the most noisy of the family. A cock bird cannot help making his presence known, at one time or another during the day, and also on moonlight nights, by his high-pitched, harsh, and defiant call; a challenge to all other cock birds within earshot. When once heard it cannot be mistaken; there is no other call like it. During the heat of the day it lies up, in small coveys of three to five, often less, but rarely more, under the shade of a thick bush, where it squats very close, and is often very difficult to move; in fact it will sometimes literally play hide and seek. It affords

<sup>1</sup> Dr. van Someren places all Uganda birds, and those from Kisumu to Mt. Moroto and the Nile under, *F. s. ochrogaster* Hartl.

capital sport, as it is very quick on the wing; but at least two beaters are required on each flank. It occasionally perches on trees. It evidently has two breeding seasons, as Dr. V. G. van Someren found a nest in May, and I found one, containing six eggs, near Ndara in Teita, in December. The nest was a shallow depression, scratched by the birds, under a small shrub in a clump of weeds, and was lined with a few dry grasses. The eggs are ochreous cream freely and closely speckled and freckled with pale brown, and measure  $38-41 \times 27-28$  mm.

The shell of all Francolins' eggs is very hard, but for thickness and hardness this bird's is "the limit"; it resists the drill far greater than any other.

*Francolinus sephaena jubaensis*.

JUBALAND CRESTED-FRANCOLIN.

*Francolinus grantii* Hartl.

Sharpe's Hand List, Vol. I. p. 23.

Reichenow's Vögel Afrikas, Vol. I. p. 496.

*Francolinus sephaena jubaensis* Zedlitz.

Praed's, African Francolins, *Ibis*, 1922, p. 112.

Sclater's Systema Avium Ethiop., Part I. p. 80.

*Description.* The smallest form of *F. sephaena*. It is scarcely separable in colour from *F. s. grantii*, though as a rule it is somewhat greyer on the back. Little or no signs of striping on the undersides. Length of female, 294 mm.; wing, male, 135-142 mm.; female, 130-136 mm.

*Distribution.* Kenya coast regions from the Italian frontier to the Tana River.

*Recorded Localities.* Lamu, Manda Island, Taka. M'konumbi, Mashundwani, Jipi, Kiunga. M'koi (Turner).

*Notes.* This is the smallest race of Grant's Bush-Francolin, and it is confined to the coast between the Tana River and the Italian frontier; its range inland is at present unknown. It is perhaps one of the few game birds that has not suffered through the advance of civilization, since the area of its bush-stronghold, instead of being cut down, has vastly increased in area through the abolition of slavery, and thereby causing the once prosperous and highly cultivated Witu and Lamu districts practically to be abandoned. It was particularly plentiful on Manda Island, where many times a bag of four or five brace, as well as two or three Kirk's Dik-dik, was made before breakfast. In November it was found in coveys of six to eight, and sometimes ten, but it required several beaters and much vigorous bush-beating to make it take wing.

In habits it in no way differs from the foregoing, in so far as I was able to note, except perhaps in its ability to subsist without water, saving dew-drops, for many months in the year. This applied equally to Lamu Island and the mainland, where wells were the only source of supply, and they were mostly much too deep for a bird to negotiate.

It breeds between April and June, and the cock birds at that time are very silent.

*Fracolinus sephæna* (Race 3).

## RENDILI CRESTED FRANCOLIN.

*Fracolinus grantii* Hartl.

Sharpe's Hand List, Vol. I. p. 23.

Reichenow's Vögel Afrikas, Vol. I. p. 496.

*Fracolinus sephæna*, subsp. 3.

Praed's African Francolins, *Ibis*, 1922, p. 112.

*Fracolinus sephæna grantii* Hartl.

Sclater's Systema Avium Ethiop., Part I. p. 80.

*Description.* A small pale desert race, the palest form known; it never has any sign of striping on the underside [Praed]. Wing, male, 140–148 mm.

*Distribution.* Kenya; Rendili and Samburu districts.

*Recorded Localities.* Marsabit. Orr Valley (Percival). Lower N. Uaso Nyiro (Col. Clarke).

*Notes.* It certainly differs from the type-race in appearance, but it is doubtful if it does so in any other respect. My collector, Bafirawara, obtained it as far north as Marsabit. Mr. A. B. Percival obtained a couple in the Orr Valley, and Colonel Stephenson Clarke got it near Lorian.

*Fracolinus sephæna spilogaster.*

## BORAN CRESTED FRANCOLIN.

*Fracolinus spilogaster* Salvadori.

Sharpe's Hand List, Vol. I. p. 23.

Reichenow's Vögel Afrikas, Vol. I. p. 496.

*Francolinus sephaena* subsp. 4.

Praed's African Francolins, *Ibis*, 1922, p. 112.

*Francolinus sephaena spilogaster* Salvadori.

Slater's *Systema Avium Ethiop.*, Part I. p. 80.

*Description.* Similar to the type-race, but larger, and has consistent though narrow striping on the paler underside [Praed]. Wing, male, 149–160 mm.; female, 138–140 mm.

*Distribution.* Kenya, close up to the Abyssinian frontier.

*Recorded Localities.* Moyale, and Wajheir.

*Notes.* This race is represented by seven specimens in my collection, obtained by my collector, Bafirawara. Dry skins can tell no tale, nor did the man behind the gun detect any difference in habits from the type-race, with which he was quite familiar.

“Tele” (plenty) was his only remark in reply to questions as we went through his collections together. It is obviously a form of *spilogaster*, the birds from Moyale being darker than those from Wajheir.

*Francolinus sephaena delutescens.*

MT. KENYA CRESTED FRANCOLIN.

*Francolinus grantii* Hartl.

Sharpe's Hand List, Vol. I. p. 23.

Reichenow's *Vögel Afrikas*, Vol. I. p. 496.

*Francolinus grantii delutescens* Mearns.

Smith's Misc. Coll., LVI. 1911, No. 20, p. 3.

*Francolinus sephæna grantii* Hartl.

Slater's *Systema Avium Ethiop.*, Part I. p. 80.

*Description.* Most related to *F. s. grantii* Hartlaub. Compared with that bird it is seen that the size is slightly greater; the general colour is much more greyish, especially on the back, rump, and chest; the belly and crissum are much less ochraceous; the neck-collar of subtriangular chestnut markings is narrower, with the spots smaller; the upper parts are less rufescent—more olivaceous than reddish-brown; the white shaft-streaks of the upper parts are much narrower and more broadly bordered with black; the crown is darker, with the bases of the feathers black instead of brown. Females have the upper parts much more abundantly vermiculated, cross-banded, and dotted with black than in the females of typical *grantii*. Wing, 146 mm.

*Distribution.* Kenya.

*Recorded Localities.* N'joro, or Kasorongai River, 7000 feet (Mearns). Kenia, Embu (van Someren).

*Notes.* This bird probably holds the same position to *F. s. grantii* as the Yellow-throated Francolin (*P. l. keniensis*) does to its next-door neighbour (*P. l. infuscatus*). Both came from the same spot on the slopes of Mt. Kenya, at altitudes between 6500 and 7000 feet, and probably the highest so far recorded for either. The range of the typical race (*F. s. grantii*) would appear to be continuous throughout the bush-veldt from the south to the Ithanga Hills and Embu, and Dr. van Someren's remarks in *Nov. Zool.*, XXIX. 1922,



p. 30, in regard to this bird as a race : " Not any larger than birds from Tsavo and Chamgamwe, and resemble them in colour " should settle the question. It is, however, being regarded as a possible race for the present, as there can be no doubt *F. s. grantii* is one of, if not the most, difficult of the game birds to deal with, when it comes to separation into races.

*Francolinus sephæna rovuma.*

ROVUMA CRESTED FRANCOLIN.

*Francolinus kirki* Hartlaub.

Sharpe's Hand List, Vol. I. p. 23.

Reichenow's Vögel Afrikas, Vol. I. p. 497.

*Francolinus sephæna rovuma* Gray.

Praed's African Francolins, *Ibis*, 1922, p. 111.

Sclater's Systema Avium Ethiop., Part I. p. 80.

*Description.* *Adult.* Similar to *F. s. grantii*, but has the spotting confined to the throat; feathers of the flanks and belly with strong longitudinal chestnut stripes on the end of the shafts, blackish patches on the wing-coverts and scapulars, and bars on the under tail-coverts.

*Distribution.* Kenya.

*Recorded Localities.* Taru Wilderness (Ansorge). Vanga (van Someren).

*Notes.* This race is confined to a narrow strip of country between the railway and the frontier of Tanganyika Territory, and in habits is, no doubt, very similar to *F. s. grantii*.





1    FRANCOLINUS AFRICANUS UUFENS S

*Francolinus africanus uluensis.*

## KENYA RED-WINGED FRANCOLIN

## Plate IV.

*Francolinus uluensis* O. Grant.

Sharpe's Hand List, Vol. I. p. 24.

Reichenow's Vögel Afrikas, Vol. I. p. 487.

*Francolinus africanus uluensis* O. Grant.

Praed's African Francolins, *Ibis*, 1922, p. 116.

Sclater's Systema Avium Ethiop., Part I. p. 81.

*Description: Male.* Top of the head very dark brown edged with pale brown; rest of the under parts grey-brown blotched on one or both webs with black, and with pale buff shaft-stripes; back and tail-coverts greyish-brown, barred with buff; a rufous-buff stripe above and below the eye, extending to the upper neck, and separated by a triangular patch of white feathers with black tips an inch or more in length; chin and throat white, the marginal feathers tipped with black; chest buff, with one web or the other rich chestnut; breast pale buff, irregularly barred with dark brown; primaries chestnut shading into brown at the extremities; iris brown; bill blackish-brown, gape and base of lower mandible dull yellow; feet yellowish-brown. Length, 327-348 mm.; wing, 159-166 mm. Weight, 15 oz.

*Female.* Similar to the male but rather smaller. Length, 324 mm.; wing, 157-165 mm.

*Distribution.* Kenya. Rift Valley from Kilimanjaro to Naivasha and adjoining plateaux under 7000 feet.

*Recorded Localities.* Taveta, Kiu, Simba, Machako's, Athi, Kapiti, M'bagathi, Nairobi, Yatta, Makuyu. Kijabi, Lemek Valley and Longonoto (Cosens). Fort Hall Road (van Someren). Ithanga Hills and Thika (Praed). Kilima Thiki (Gurney). Loita, and north of Mt. Kenya (Percival). Naivasha (Granvik).

*Notes.* The Kenya Red-winged Francolin is the common red-winged and yellow-legged bird of the plains in the Rift Valley from Taveta to Kijabi, and the adjoining plateaux; it ranges east to the Yatta plains, and west to Loita. It frequents open grass country, short scrub-covered hillsides, and banks of watercourses, and is found singly, in pairs, and small coveys of four to eight. It lies very close, and when in coveys the birds rarely rise together, but one after another with a whirr-r and shrill squeal that are quite startling; the latter is kept up until they settle again, and this they generally do in all directions. Its ordinary call notes, high pitched but not unmusical, are heard in the early morning and evening, and almost invariably after a shower of rain. At Machako's, where the type was obtained, it was found singly or in pairs in February, and also at Makuyu in December; on July 3rd a hen bird, shot on the M'bagathi River, had well-developed eggs in her oviduct, and on the 8th of the same month my collector found a nest with four eggs, in the Kedong Valley. It is this unfortunate habit of having two breeding seasons that adds so greatly to the difficulty of declaring a close season for this and many other game-birds. However, a beginning might be made by landowners and sports-

men refraining from shooting single birds and pairs. In the former case, it may be a cock bird whose mate is sitting on eggs close by, or with a brood of cheepers hidden away round about in the grass. In the case of a pair the two birds generally rise, if not together, so close to each other and to the gun that before they are out of range there is time to reflect. This bird, *F. c. coqui* and *F. c. hubbardi*, are distinguished from other Francolins by Swahilis under the name "*Keringende*."

*Francolinus levaillanti kikuyuensis.*

UASINGISHU FRANCOLIN.

*Francolinus kikuyuensis* O. Grant.

Sharpe's Hand List, Vol. I. p. 24.

Reichenow's Vögel Afrikas, Vol. I. p. 491.

*Francolinus levaillanti kikuyuensis* O. Grant.

Praed's African Francolins, *Ibis*, 1922, p. 122.

Sclater's Systema Avium Ethiop., Part I. p. 83.

*Description: Male.* Top of the head brown with black middles to the feathers, and margined on the sides by a narrow whitish-buff band; sides of the face and neck rust-red; a band of white, black-tipped feathers commences at the base of the upper mandible, and passing below the eye surrounds the throat, which is rufous-white, edged externally with rust-red; a small patch of pale rufous-white feathers barred with black on the foreneck. General colour of the upper parts brown, blotched with black and with buff cross-bars

and shaft-stripes; the black markings and buff shaft-streaks being most conspicuous on the mantle, scapulars, and innermost secondaries. Rest of the under parts pale rufous-buff, the feathers of the chest with a chestnut patch on either web; sides of the breast and flanks with irregular spots and bars of black and sometimes blotched with chestnut; primaries and secondaries light chestnut, the former mottled with dusky-black towards the extremity, the latter somewhat irregularly barred with black, the bars being wider and more defined on the outermost quills; tail-feathers black, the middle pair regularly barred with buff, the outer pairs indistinctly mottled with the same colour; iris brown; bill dusky-black, gape, base of upper mandible, and lower edge of upper greenish-yellow; feet pale ochreous-yellow, with dusky toe joint. Length of male, 349–363 mm.; wing, 170–179 mm. Weight, 18–20 oz.

*Distribution.* Kenya, plateaux west of the Rift Valley.

*Recorded Localities.* Doiyo Lesos (Nandi), Uasin-gishu plateau, Londiani–Ravine road. Mau (Cosens). Sotik (Percival). Mt. Elgon (Granvik). Eldoret, Burnt Forest (van Someren).

*Notes.* It is unfortunate that the specific name of this bird is altogether a misnomer, and I regret very much that the responsibility rests with myself. The type was obtained near Doiyo Lesos on the outskirts of Nandi, but the label became detached, and as it was sent home in a box of birds mostly collected in Kikuyu, Mr. Ogilvie Grant, who described it, not unnaturally

inferred that it had been obtained somewhere in Kikuyu, or thereabouts. So far it has not been found east of the Rift Valley; and it is apparently confined to the plateaux to the west, and to altitudes ranging from 7000 to 9000 feet. It frequents the open, rolling, grassy downs, and is found in pairs or in small coveys of four to six. It is a very close squatter, and when it rises with a whirr and shrill scream, sometimes within a few feet, it is quite disconcerting, particularly when one's thoughts and attention are concentrated on stalking big game. In the early morning, when the grass is wet with dew or rain, it is fond of sitting on the curious small bare-topped ant-heaps that are such a marked feature of the higher altitudes, and from which a cock bird, standing very upright, will at regular intervals give vent to its modulated call. A highly favoured food of this Francolin is the bulb of a small crocus, that is much in evidence shortly after a grass fire. Captain Cosens obtained it at 9100 feet on Mau, due west of Lake Naivasha, and states in the *Ibis* for January 1915, p. 14: "This single young specimen was shot from a covey of five, which was put up in a patch of long grass, bordered by junipers."

*Francolinus levaillanti mulemæ.*

DOGGETT'S FRANCOLIN.

*Francolinus mulemæ* O. Grant.

Ogilvie-Grant, Bull. B.O.C. XIV. 1903, p. 30.



*Francolinus levaillanti mulemæ* O. Grant.

Præd's African Francolins, *Ibis*, 1922, p. 121.

Sclater's *Systema Avium Ethiop.*, Part I. p. 83

*Description: Adult Male and Female.* Most nearly allied to *F. levaillanti* (Valenc) and *F. kikuyuensis* Grant. They resemble the former in the colour and markings of the head and neck, the chin and middle of the throat being pure white, but, as in *F. kikuyuensis*, the mottled black and white stripes surrounding the crown are interrupted on the nape by the chestnut collar, and are not continued down the back of the neck in a nuchal band, and the chestnut white-shafted feathers are confined to the chest, the breast and belly being buff, more or less blotched, especially on the sides of the body, with blackish-chestnut. *F. kikuyuensis* always has the entire chin and throat suffused with buff;<sup>1</sup> iris hazel; bill black, base of lower mandible

<sup>1</sup> This is not a constant character, though very pronounced in the type. To those who regard this bird as inseparable from *F. l. kikuyuensis*, I would point out that there is a very marked difference between the rufous or rusty-red of the superciliary stripe, the sides of the neck, and the band that circumscribes the white or buffy-white throat of *kikuyuensis*, and the reddish-buff in *mulemæ*. Furthermore, the former bird appears to be confined to the Uasin-gishu Plateau and near neighbourhood, at altitudes between 7000 and 9000 feet, while the latter has not been found east of the Uganda kingdom, where it confines itself to altitudes between lake level (3735 feet), and (in Toro) 5000 feet. Mr. Præd in his Review of the African Francolins in the *Ibis*, 1922, p. 122, has expressed doubt as to the status of *F. l. kikuyuensis*, and suggests that it may prove to be merely a phase of *F. l. mulemæ*. When more examples of the former are available for comparison, it may be difficult to separate

yellow ; feet dull yellow. Length : male, 347–375 mm. ; wing, 164–173 mm. ; female, wing, 157–167 mm. Weight, male, 16–19 oz. ; female, 14–16½ oz.

*Distribution.* Uganda.

*Recorded Localities.* Kisubi, Masaka, Lyantonde, Rusasa, Lukai, Lwengi, Kasenyi, Kibali, Lizingo (Singo), Maanja Valley, Kisanji, Bukatira. Mpumu (Seth-Smith). Banda (van Someren). Mulema (Doggett).

*Notes.* Doggett's Francolin is confined to Uganda. It was discovered by the late W. E. Doggett on Mulema Hill near the mouth of the Kagera River, while he was attached as naturalist to the Anglo-German Boundary Commission under Colonel C. Delme-Radcliffe. It is a common bird, and widely distributed throughout the short-grass country, or cattle-grazing areas in the kingdom of Uganda, Ankole, eastern Toro, and the southern part of Bunyoro. It is more plentiful in Ankole than elsewhere, and particularly so within a radius of fifteen miles of Mbarara. It frequents open short-grass country, patches of scrub, and native cultivations, and is found in pairs and small coveys of four to six. It has a loud shrill call, and is thereby easy to locate in the early morning and late evening : but it is by no means easy to flush without the aid of a few beaters, as it is a very close squatter. It is always very noisy after a shower of rain. In the early mornings, when the grass is wet with dew or rain, it is often seen

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the one from the other, but in that case *mulemæ* will have to be relegated to a synonym, and not *kikuyuensis*, which was described by Mr. Gilvie-Grant six years previously.

on the footpaths and roads sunning itself, or having a dust-bath, and when disturbed it generally creeps away into covert for a short distance and there squats. It affords capital sport, as it is very quick on the wing, rarely goes far, and is easily marked down. It is commonly known to Europeans in Uganda as "the Yellow-legged Francolin that squeals," and in Ankole as "the Large Yellow-legged Squealer," in contradistinction to the smaller and scarcer *F. coqui*. It breeds in September and January and February, and it is at those times remarkably silent, and generally seen singly or in pairs.

*Francolinus shelleyi trothæ.*

TROTHA'S FRANCOLIN.

*Francolinus shelleyi* O. Grant.

Sharpe's Hand List, Vol. I. p. 24.

*Francolinus shelleyi trothæ* Reichen.

Reichenow's Vögel Afrikas, Vol. I. p. 490.

*Francolinus shelleyi shelleyi* O. Grant.

Praed's African Francolins, *Ibis*, 1922, p. 119.

Sclater's Systema Avium Ethiop., Part I. p. 82.

*Description: Male and Female.* Crown of head dark brown edged with pale rufous brown; hind neck rufous, with black tips to the feathers; rest of the upper parts ashy-brown, suffused in the middle of the back with rich chestnut-brown and brownish-black mostly on one web only; shaft-stripes whitish-buff to reddish-buff;

primaries rufous with pale brown towards the tips; secondaries rufous mottled with pale brown and buff; rest of wing ashy-brown, barred with reddish-buff and with buff shaft-stripes; rump and tail-coverts ashy-brown vermiculated with buff, and with blackish-brown blotches; tail dark brown, irregularly striped with buff; two narrow bands of black and white feathers, the upper one starting behind the eye and ending on the neck, the lower one starting at the base of the bill and encircling the rufous ear-coverts, chest and flanks heavily blotched with chestnut on one web, the other being ashy-grey with buff markings; breast barred black and white; abdomen, under tail-coverts, and thighs pale buff irregularly barred with brown; iris brown; bill brownish-black, gape and base of lower mandible yellow; feet yellow. Length, about 305-330 mm.; wing, 160-170 mm.

*Distribution.* Uganda.

*Recorded Locality.* South-eastern Uganda, Mulema (Doggett).

*Notes.* This race of *F. shelleyi* is much greyer above, and the black and white under parts are more extensive and much more pronounced than in the type race from South Africa, and would appear to be much closer to *F. s. trothae*, which is found in Tanganyika territory. Mr. Doggett obtained three examples, all females, on Mulema Hill.

*Francolinus shelleyi elgonensis.*

## ELGON FRANCOLIN.

## Frontispiece. Plate I.

*Francolinus elgonensis* O. Grant.

Sharpe's Hand List, Vol. I. p. 491.

Reichenow's Vögel Afrikas, Vol. I. p. 491.

Praed's African Francolins, *Ibis*, 1922, p. 120.*Francolinus shelleyi elgonensis* O. Grant.

Sclater's Systema Avium Ethiop., Part I. p. 82.

*Description* : Top of the head black, each feather margined with pale rusty-brown ; back of the neck chestnut, with a black spot at the tip of each feather ; back and scapulars a mixture of black and dark brown, barred with pale rusty-brown and buff, and with buff shaft-stripes ; sides of the face and neck buff, divided from the top of the head, and also from the throat, by mixed black and white lines ; throat buffy-white, bordered by a circular line of black spots ; lower throat and chest pale chestnut, the feathers tipped with one or two black spots ; breast buff, barred with very dark brown ; flanks chestnut, barred with dark brown, and with narrow shaft-stripes of buff ; abdomen and rest of the under parts brownish-grey, closely barred with dark brown. Primaries and inner secondaries light chestnut, barred and mottled with dark brown towards the tips ; iris brown ; bill blackish-brown, base of lower mandible yellowish-horn colour ; feet dusky-yellow. Length of male, 407 mm. ; wing, 178-183 mm.

*Female.* Similar but smaller. Length, 349–359 mm. ; wing, 176 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Mt. Kenya, the Aberdares, Mt. Elgon.

*Notes.* Of all the Francolins found in the Colony and Uganda this one is least known, and the rarest in collections. These facts are, no doubt, due to its frequenting only the Alpine zones of the highest mountains. The type was obtained in February on the north side of Mt. Elgon at an altitude of 11,000 feet; it was one of a covey of four. For some nineteen years the type, a hen bird, in the British Museum remained unique, until it was rediscovered on the top of the far-distant Aberdare range, close to the Gura River. This was very early on a bright sunny morning in August, when a call exactly similar to that of *F. a. uluensis* rang out from the far side of a swampy hollow; a challenge that was answered almost immediately by another, not very far ahead, and on or close to our footpath. A cautious advance along the latter revealed a cock bird standing bolt upright and calling on the path, and two others close by, dusting themselves. Of these two, were ruthlessly potted as they sat, and a third one was bagged as it rose with two others not noticed as they squatted in the heather-like scrub. About a fortnight previous to that red-letter day, a large, dark, rusty-red-winged Francolin rose almost at my feet on the northern slopes of Mt. Kenya, at an altitude of 10,000 feet, and there can, I believe, be little doubt that it was this bird.

*Francolinus icterorhynchus dybowskii.*

DYBOWSKI'S FRANCOLIN.

*Francolinus dybowskii* Oust.

*Sharpe's Hand List*, Vol. I. p. 25.

*Francolinus icterorhynchus emini* O. Neum.

Neumann, Orn. Monatsb., 1907, p. 198.

Praed's African Francolins, *Ibis*, 1922, p. 126.

*Francolinus icterorhynchus dybowskii* Oust.

Sclater's *Systema Avium Ethiop.*, Part I. p. 85.

*Description: Adult Male and Female.* Lores and front of the head black, shading into dark brown on the top. Feathers of the sides of the throat, neck, and mantle black margined with buff; back, scapulars, rump, and upper tail-coverts brown, finely vermiculated with black and buff; the shafts are reddish-brown, and most of the feathers have a wide black shaft-stripe, becoming pointed at the extremity, most marked on the scapulars, which, with the wing-coverts and some of the feathers of the back, are irregularly barred and marked with buff; primaries and secondaries dark brown, both webs of the latter irregularly barred with rufous-buff; an indistinct white superciliary stripe, and a band from the nostril to below the eye, of the same colour; space in front of eye and cheek black; ear-coverts brown; chin and middle of throat white; chest black, margined with buff; breast and abdomen the same, but the terminal portion of the black is circumscribed by the buff and forms an irregular oval or round spot; sides and flanks

black irregularly barred with pale buff; tail blackish-brown, with narrow, wavy bars of rufous-buff; iris brown; bill blackish-brown, base orange-red; lower mandible orange-red with yellow tip; feet orange-yellow, toes dusky; bare skin behind eye dull yellow. *The female has the base of the mandible coral-red, lower mandible coral-red, and bare spot behind eye red; feet bright coral-red.* Length of male, 362–384 mm; wing, 180–188 mm. Weight, 19–23 oz. Length of female, 324–381 mm.; wing, 169–175 mm. Weight, 15–16½ oz.

*Distribution.* Uganda.

*Recorded Localities.* Wera, Dokolo, Ekwera, Ikwa, Nyonki, Lokolegga, Lungi, Busibika, Kigoma, Wasa River Toro, Kizibu, Bunyoro, Bukatira, Kibali, Masindi, Nimuli (Seth-Smith). Lango (Fox). Falabek (Cosens). Mubendi (Seth-Smith).

*Notes.* Dybowski's Francolin is much more like the so-called "Spur-fowl" (*Pternistes*), both in general habits and its harsh grating call, the latter being exactly like that of *P. l. infuscatus*. It frequents open grass country and short scrub, with a fair sprinkling of trees and ant-hills, and it is distinctly partial to the vicinity of cultivations. It is much more often heard than seen. The call of the cock bird is heard morning and evening, and invariably after a shower of rain, and the bird itself is nearly always perched on a tree, or on the top of an ant-hill. It then affords good sport with a .22 rifle. In my own collection there are twenty specimens of this bird, of which no less than fourteen are cock birds, and I attribute this predominance entirely to its call, which



both attracts attention, and invites a pot-shot after a cautious, and quite sporting stalk. Again, like the "Spur-fowl," it is much more given to seeking safety by running than by flight, or by skulking. It is found singly, in pairs, or small coveys of three to five.

*Francolinus ugandensis.*

UGANDA FRANCOLIN.

*Francolinus gedgei* O. Grant.

Sharpe's Hand List, Vol. I. p. 25.

Reichenow's Vögel Afrikas, Vol. I. p. 481.

*Francolinus ugandensis* O. Neum.

Praed's African Francolins, *Ibis*, 1922, p. 127.

Sclater's Systema Avium Ethiop., Part I. p. 86.

*Description.* Similar to *F. i. dybowskii*, but it has red-brown markings on the flanks. Length of male, 342-375 mm.; of female, 362 mm.

*Distribution.* Uganda.

*Recorded Localities.* Busibika, Kigoma, Wasa River Toro, heard in several places in Gomba, Kyagwe and Bulemezi, Mondo, Hoima (Ansorge). Mpumu, Kyetema, Kasala, Kampala, Kyama, Kawala, Kyanja (van Someren). Baradiri (Fox).

*Notes.* There has been considerable confusion and misunderstanding in regard to this bird. Two examples of it were obtained by Dr. Ansorge, one at Mondo in Kyagwe, the other at Hoima in Bunyoro, and Dr. Hartert referred them to *F. gedgei*, and Professor

Reichenow repeated the error in his "Die Vögel Afrikas." Later on I unwittingly assisted in adding to the confusion by publishing some notes on the francolins in the *Journal of the East Africa and Uganda Natural History Society*. Following Dr. Hartert, and also Dr. Sharpe, who had referred three of my specimens, collected at Busibika in the Maanja valley, and Kigoma in Singo, to *F. gedgei*, I stated that that species is found both in Uganda and Bunyoro; but it is not so, *F. gedgei* being a totally different bird.

This race is founded mainly on the rust-brown markings on the flanks, and if these were constant in the birds found in Uganda and Bunyoro, there would be some justification for treating it as a well-marked race. But the brown markings are quite exceptional, and I share the doubts expressed by both Dr. V. G. van Someren and Mr. Mackworth-Praed as to its being separable from *F. i. dybowskii*; and this doubt is strengthened by a pair with brown flank-markings shot at Nyonki in the Nile district (now Sudan territory), and on the same evening as several examples of Dybowski's bird. I believe the brown markings will prove to be merely a phase, or due to old age, and that this race will have to be suppressed. In habits there is no difference, if one can except the greater difficulty in obtaining it in Uganda and Bunyoro owing to the thicker covert it frequents; it is mostly confined to the dense bush or elephant-grass country.

Dr. V. G. van Someren, in the *Ibis* for April 1916, p. 217, writes: "These birds are met with in the scrub-

country and near native cultivations. Nests and eggs were taken in May and June, and young of about two weeks old in July, also in August and September."

*Francolinus clappertoni gedgei.*

GEDGE'S FRANCOLIN.

Plate V.

*Francolinus gedgei* O. Grant.

Sharpe's Hand List, Vol. I. p. 25.

Reichenow's Vögel Afrikas, Vol. I. p. 481.

*Francolinus clappertoni gedgei* O. Grant.

Praed's African Francolins, *Ibis*, 1922, p. 128.

Slater's Systema Avium Ethiop., Part I. p. 86.

*Description: Male.* Top of the head and upper parts rich dark brown; lores black; a superciliary white stripe commences behind the nostrils, and is prolonged on either side of the head. A black patch above the gape edged with white; ear-coverts rufous; feathers on the sides of the head and neck white with wide black centres. Chin and throat pure pearl-white. Feathers on the back and sides of the neck, back, and wing-coverts margined on either side with white, those on the lower back with an olive-brown patch on either side of the extremity; rump and upper tail-coverts olive-brown with dark centres; the latter irregularly edged and marked with buff; chest and rest of under parts pale buff, with wide, black, club-shaped shaft-streaks; some of the feathers of the sides of the flanks ornamented in addition with an oval chestnut patch, edged internally



V. FRANCOLINUS CLAPPERTONI GEDGEI



with black on the margin of either web. Wings of dark brown; outer primaries with the terminal part of the outer web margined, and the basal part barred with buff; the greater part of the terminal half of the inner web is also buff; rest of the primaries and the secondaries are marked, barred, and irregularly margined with buff; tail dark brown, with narrow, wavy bars and margins of pale buff; "iris dark brown; feet brown in front, reddish behind" (Gedge). "Iris brown; bare skin red; bill black, reddish at base (one male is also very red on the nostrils), feet and toes red, darker in front." Length, 394-419 mm.; wing, 195-197 mm.

*Female.* "Length, 362 mm.; wing, 180-181 mm." (Lowe).

*Distribution.* Uganda.

*Recorded Localities.* Mt. Elgon. Nakwai Hills, Kamchura, Lohor (Cosens).

*Notes.* The type of this fine Francolin was obtained by my friend, Mr. Ernest Gedge, at the foot of Mt. Elgon in February. It was at that time confined within a small narrow strip of open dry sandy plain, about four miles in width, dotted with patches of short scrub and clusters of the tooth-brush shrub (*Salvadora persica*), and lying between two long spurs of the mountain, about six miles E.S.E. of the Kilim River. That morning, as I limped along ahead of the caravan with a very bad foot, at least a hundred birds were seen. Singly, and in twos and threes, they kept getting up, or running to one side or the other of the path for perhaps a distance of four miles, when we left their domain as suddenly

as we had entered it. Sad to relate, it was mistaken for the Yellow-throated "Spurfowl" (*Pternistis*) and never a shot was fired; and it was only when Gedge reached camp with his prize that my blunder was realised. It was then impossible for me to struggle back so far, nor did the loan of a gun and offer of a good reward to one of my men make amends, and it was not until February 1913—or twenty-three years later—that Captain Cosens re-discovered it in British territory in the Nakwai Hills, about a hundred miles away to the north. A note, jotted down at the time in my diary, explains more fully, though it scarcely excuses my mistake; it certainly very forcibly exemplifies the maxim, "when a chance offers, seize it." "Tripped up badly, but only partly due to sore foot. . . . The bird at a distance is exactly like the 'Spurfowl'; it looks like it when flying, it runs like it, its call is like it, and the place with its sprinkling of tooth-brush bushes is just the very spot to expect it." Since then, it is greatly to be feared that it has been much reduced in numbers, if not decimated; as for many years a Greek trader with a gang of scalliwag Swahili gun-runners and elephant poachers had a large standing camp on the Kilim River, and no doubt their Kavirondo and Basoga followers, and hangers-on, would scour the country for anything eatable, and clear it for miles around, by trapping.

*Francolinus hildebrandti hildebrandti.*

## HILDEBRANDT'S FRANCOLIN.

*Francolinus hildebrandti* Cabanis.

Sharpe's Hand List, Vol. I. p. 25.

Reichenow's Vögel Afrikas, Vol. I. p. 477.

*Francolinus hildebrandti hildebrandti* Cab.Praed's African Francolins, *Ibis*, 1922, p. 129.

Sclater's Systema Avium Ethiop., Part I. p. 87.

*Description: Male.* Top of the head black with grey margins; back of neck and shoulders black with white margins; back and rest of the upper parts closely freckled and vermiculated with black, grey, and pale brown; throat pale buff; cheeks and sides of face pale buff with black centres; breasts and flanks white with large black blotches; abdomen brownish-buff; iris brown; bill brown, gape and lower mandible orange; feet orange-red, with dusky-black toes. Length, 366-385 mm.; wing, 180-185 mm.

*Female.* Upper parts similar to those of the male; throat buff; neck and upper breast black with grey margins, and reddish-buff; iris brown; bill brown, gape and lower mandible coral-red; feet red. Wing, 167-180 mm.

*Distribution.* Kenya.

*Recorded Localities.* Voi River. Useri River (Hunter). Teita (Hildebrandt). Kibwezi (van Someren).

*Notes.* Hildebrandt's Bush-Francolin was plentiful on the Voi River up to the time the railway reached that



point in 1896; but as most game birds are easy to trap, it is now probably very nearly extinct within ten miles of the Railway Station.

It was confined to the very densest bush, bordering the river, and in habits it is similar in all respects to its near relative *F. h. altumi* of the Rift Valley further north.

This Francolin was named by Cabanis in 1878 after Dr. Hildebrandt, the German traveller and naturalist, who obtained a hen bird in Teita, probably on the Voi River. Dr. Fischer subsequently obtained both sexes at Naivasha, but did not recognise that they were male and female of one species, and being deceived, no doubt, by the remarkable difference in plumage, he and Professor Reichenow, in 1884, named the cock bird *F. altumi*. Four years later, my friend, Mr. H. C. V. Hunter, spent a few weeks in Moshi on Kilimanjaro, where this race was very plentiful and the natives were adepts at snaring it, and he decided the question by carefully dissecting a considerable number, and proved conclusively that the differences were sexual only. Up till quite recently this race was supposed to range up the Rift Valley as far north as Elgeyu and Kamassia, when Mr. Claude Grant, in the *Ibis* for 1915, p. 12, pointed out the differences that warrant the separation of the northern bird as a race, and grouped it under *F. h. altumi*.





VI. FRANCOLINUS HILDEBRANDTI ALTUMI

*Fracolinus hildebrandti altumi.*

## ALTUM'S FRANCOLIN.

## Plate VI.

*Fracolinus altumi* Fischer and Reichen.

Journal Ornith., 1884, p. 179.

*Fracolinus hildebrandti* Cab.

Sharpe's Hand List, Vol. I. p. 25.

Reichenow's Vögel Afrikas, Vol. I. p. 477.

*Fracolinus hildebrandti altumi* Fischer and Reichen.Claude Grant, *Ibis*, 1915, p. 16.Praed's African Francolins, *Ibis*, 1922, p. 130.

Sclater's Systema Avium Ethiop., Part I. p. 87.

*Description: Male.* Similar to the typical race but slightly larger and darker above; iris brown; bill dusky horn colour with yellow base, lower mandible dusky orange-yellow; feet bright orange-yellow to coral-red with dusky toe-joints. Length, 370–381 mm.; wing, 190–198 mm. Weight, 20–21 oz.

*Female.* Above similar to adult male; considerably greyer on the top of the head and nape than the female of the typical race. Sides of the head and throat whiter and greyer (much less buffy), and the former more distinctly streaked; below much paler, with the neck, chest, and flanks very distinctly spotted and mottled with blackish, in contradistinction to the uniform cinnamon-brown; iris brown; bill brown, lower mandible reddish-orange; feet coral-red. Length, 355–362 mm.; wing, 175–183 mm. Weight, 17 oz.

*Distribution.* Kenya. The Rift Valley and adjoining plateaux.

*Recorded Localities.* Kedong, Naivasha, Ndabibi, Elmenteita, Eldoma Ravine, Elgeyu, Kamassia, Ilpolossat, Malawa River, Morandat, Gil Gil, Sotik, Lemek Valley, Suswa, and Leganisho (Cosens). Narosara (Clarke). N. Uaso Nyiro (Percival). Escarpment (van Someren).

*Notes.* Altum's Francolin is, or was, very plentiful in the Kedong Valley, on both sides of Lake Naivasha, and particularly so on the west, on the Morandat and Gilgil rivers, on the escarpment east of Lake Elmenteita and northwards, and also on the foothills of Mau from Ndabibi to Elgeyu and Kamassia; but trapping and shooting all the year round must have greatly thinned its numbers. It is a noisy bird at most times, but when startled it is particularly so, and will often keep up its sharp, half-angry, half-frightened call when only a few feet away, but yet completely hidden in the dense cover. It is found in small lots of two or three, and occasionally four or five. It delights in rocky, broken ground on hillsides covered with bush. When disturbed it often flies up into trees, or large bushes, and frequently roosts in such positions. It is a difficult bird to flush, and prefers to seek safety by running and skulking to taking wing, and when it does rise it flies low and just clear of the bush tops, and rarely goes beyond shot-gun range. Morning and evening are the best times to obtain it, as it then ventures out into more open ground to feed. On July 23rd, when on a trip

round Lake Naivasha, and encamped on the west side, a Kikuyu porter brought me four eggs of this bird which he had found close by. On accompanying him to the nest, it was found snugly hidden at the foot of a leleshwa stump, amongst grass about 2 feet high. The nest, a small scraped-out depression, was lined with dry grass, dead leaves, and many unmistakable breast feathers of the parent bird. It probably breeds throughout its range in July and August, and again in January and February.

*Francolinus hildebrandti helleri.*

HELLER'S BUSH-FRANCOLIN.

*Francolinus hildebrandti helleri* Mearns.

Mearns, P.U.S. Nat. Mus., XLVIII. 1915, p. 381.

Praed's African Francolins, *Ibis*, 1922, p. 130.

Sclater's Systema Avium Ethiop., Part I. p. 87.

*Description.* Similar to *F. h. altumi*, but male redder-brown above, and with more white below; female more olive-brown, less greyish. Wing, male, 188 mm.; female, 170 mm.

*Distribution.* Kenya.

*Recorded Locality.* Mt. Lololokwi.

*Notes.* Heller's Bush-Francolin is, so far, only known from the isolated Mt. Lololokwi, and that point may prove to be the limit to the N.E. of the range of the species, and the finest and most interesting of the Bush-Francolins found in the Colony. In spite of its complete isolation, it probably differs in its habits very little, if at all, from *F. h. altumi*.

*Francolinus squamatus zappeyi*.

## ZAPPEY'S FOREST FRANCOLIN.

*Francolinus schuetti* Cabanis.

Sharpe's Hand List, Vol. I. p. 25.

Reichenow's Vögel Afrikas, Vol. I. p. 468.

*Francolinus squamatus zappeyi* Mearns.

Mearns's Smiths Misc. Coll. LVI. 1911, No. 20, p. 4.

Præd's African Francolins, *Ibis*, 1922, p. 132.

Sclater's Systema Avium Ethiop., Vol. I. p. 88.

*Description: Adult Male.* May be readily distinguished by the very broad pale edgings to the feathers of the under parts, and the absence of coarse markings on the upper part; the crown is greyer and less brownish-olive; the back and scapulars the same, but with clearer grey margins to the feathers; lower back, rump, and upper tail-coverts more olive-brown; iris brown, eyelids pale brown, bill coral-red; feet orange-red. Length, 349–362 mm.; wing, 170–185 mm. Weight, 17–18 oz.

*Female.* Similar to the male but smaller. Wing, 155–167 mm. Weight, 13½–15 oz.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Entebbe, Mabira, Lyantonde, Buddu, Kibale, Matire, Mawakota, Kyagwe, Bulemezi, Kichwamba Kigezi. East shore of Lake Victoria (Mearns).<sup>1</sup> Amala River (Cosens). Sotik, Kericho

<sup>1</sup> In *F. s. zappeyi* we have a race of Francolins that must, at some time, have ranged throughout the upper half of the basin of Lake Victoria, between 4000 and 5500 feet, but has now become

(Clarke). Mpumu (Seth-Smith). Kyetema, Kasaka, Kisii (van Someren). Mubuku Valley (Woosnam).

*Notes.* Zappey's Forest Francolin in its habits is similar in all respects to the Highland race (*F. s. maranensis*). In Uganda, it is found as far west as the lower slopes of Ruwenzori; but here and there on the Buddu-Ankole and Ankole-Toro borders it is met with in more open and undulating country, sparsely timbered with groups of acacias and large clumps of bushes. At Entebbe, prior to the destruction of the forests within the township area, it was quite plentiful, and still is so on the peninsula further afield. Even at the time of writing (1917) there are a few left in the fringe of bush and scrub on the edge of the swamp below the cemeteries, and a couple ranged to and fro between the Botanical Gardens and the bush below the Chief Secretary's house up to the time I left.

It has two distinct calls. One, either a greeting to its mate, or a challenge to an opponent, is heard at the first streak of dawn and on and off during the first and last two hours of daylight, occasionally throughout a dull day, and after a shower of rain; the other, on being disturbed, is a short, shrill cackle, conveying a sense of alarm or extreme annoyance.

Mr. Seth-Smith in the *Ibis*, 1913, p. 507, writes: "The only common Francolin in the district (Mpumu). It is invariably met with in pairs. It usually perches

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isolated on the eastern shore, due, possibly, to the destruction of its bush and forest strongholds, and to constant trapping by Kavirondo and other natives.



after being flushed by dogs, and can then be approached to within a few yards, and will often not fly until stones have been thrown, and then only if almost hit."

At Entebbe, it breeds between March and August, but mostly in June and July, and again in October.

The nest is a simple depression scratched in the ground, and lined with dry grasses, a few leaves and occasionally some breast feathers of the parent bird. It is well hidden in low scrub, or under a bush, and generally close to the outer edge of a patch of forest. The eggs are usually three to four in number (one of six was taken on July 3rd, and Mr. Belcher found one of five on May 19th), and are exactly like those of *F. s. maranensis*, pale cream or buff in colour, and minutely speckled with white. The shell is remarkably hard and defies the drill unless aided by a small cross-cut with a file. They measure  $43.5 \times 31.5$  mm.

*Francolinus squamatus maranensis.*

MEARNS'S FOREST FRANCOLIN.

*Francolinus schuetti* Cabanis.

Sharpe's Hand List, Vol. I. p. 25.

Reichenow's Vögel Afrikas, Vol. I. p. 468.

*Francolinus schuetti maranensis* Mearns.

Mearns's Smiths. Misc. Coll. LVI. 1910, No. 14,  
p. 1.

*Francolinus squamatus maranensis* Mearns.

Praed's African Francolins, *Ibis*, 1922, p. 133.

Sclater's Systema Avium Ethiop., Part I. p. 88.

*Description: Adult.* Crown sepia; feathers of back and scapulars dark brown edged, except at the top, with pale grey, with dark chestnut shaft-streaks, and coarse marginal black speckles; lower back, rump, and upper tail-coverts vandyke-brown vermiculated with black; outer webs of outer primaries mottled and pencilled with rusty-brown; feathers of the chest broccoli-brown with broad apical shaft-stripes of sprout-brown, without speckles; lower breast, upper abdomen, and flanks broccoli-brown with darker brown centres to the feathers, and narrow submarginal creamy-white stripes; iris brown; bill bright coral-red; bare patch above ear dusky-yellow; feet bright orange-red. Length, 325–383 mm.; wing, male, 175–195; female, 163–180 mm. Weight of male, 17–20½ oz.

*Distribution.* Kenya.

*Recorded Localities.* Nairobi, Kyambu, Ngong, Limuru, Kijabi, Il-polossat, Thomson's Falls, Eldoma Ravine, Mau Forest (8500 feet), Uasingishu Plateau, Nandi. Thika (G. L. Harrison). Kapiti (Gurney). Fort Hall, Aberdare Mountains, Kenya, Solai, etc. (Praed). Soy, Mt. Elgon (13,000 feet) (Granvik). Molo (van Someren). With Mr. Stuart Baker's definition of a sub-species or race before me as a precept, supplemented and confirmed by an examination of a large number of skins from the Colony and Uganda in the British Museum and my own collection, I am unable to recognise more than two races of this fine Bush-Francolin, namely *F. s. maranensis* and *F. s. zappeyi*. Mr. Claude Grant, in the *Ibis* for 1915, p. 18, has placed a bird

obtained by Captain Cosens on the Amala River under *F. s. schuetti*, and says that it ranges from Uganda to the west side of the Rift Valley. But Mr. Praed in his Review of the African Francolins places that particular bird, and two others <sup>1</sup> from practically the same locality, under *F. s. dowashanus* of Madarasz, with a query mark, In the meantime, Dr. Granvik has placed birds he obtained at Soy on the Uasingishu Plateau, and on Mt. Elgon up to 13,500 feet, under *F. s. maranensis*, and I consider the somewhat larger birds from the Eldoma Ravine and Mau Forest, 8500 feet—Mr. Praed's sub-species 2—should also be included in this race. Unfortunately, Colonel Mearns's "east shore of Victoria Nyanza" as the type-locality of *F. s. zappeyi* is somewhat vague, but seems to point to an unnamed and uninhabited spot somewhere west of the Amala River and near the lake, rather than to Kavirondo, Kisii, or other well-known districts. If, therefore, Captain Cosens's bird is referable to *F. s. zappeyi*, it is more than probable that it reached the upper waters of the Amala by following the river from the lake, and *F. s. dowashanus* will have to be relegated to a synonym, as the Amala and Ngare Dowash (or Dabash) are one and the same river, and barely 140 miles long. It must not be overlooked that Francolins from the same locality are subject to very considerable variations in markings, colour, and size.

<sup>1</sup> These two birds were obtained by Col. Stevenson Clarke, and have certainly very pale and almost white margins to the feathers of the under parts, but this is, I think, due to the skins having been properly cleaned and made up by a taxidermist at home.

*Notes.* Mearns's Francolin is a forest bird; that is to say, it is found on the outer edge of forests, and in the adjoining fringe of bush and scrub, in forest glades and clearings, and nearly always retreats to the forest for safety. In the Colony, it is commonly known to Europeans as the "Red-leg," and is found throughout Kikuyu, from Ngong and Kijabi to Nyeri and Fort Hall, ranges north to the Uaso Narok and Solai, and west to Mt. Elgon. Prior to the construction of the railway and the advent of settlers, it was very plentiful at Nairobi, Kyambu, Limuru, and onwards to Kijabi. But it had, unfortunately for it, a market value, and has, in consequence, been sadly reduced in numbers by trapping. During the construction of the railway between Nairobi and Kijabi, many thousands were trapped by the Akikuyu and sold to the Indian coolies. On my way up to Uganda in 1899, when railhead was then a little beyond Kikuyu Station, forty of these birds were bought by my Swahili porters at one camp, and ten to a dozen by myself; the latter were released next day when passing through a suitable piece of forest. Subsequently, many Europeans thoughtlessly shot the bird all the year round, but now, happily, the majority, if not all of them, recognise a close season. Since so much of the forest within the area referred to above has disappeared at the hands of fuel contractors, or been nibbled away by natives in their greed for virgin soil for their shambas, this Francolin has adapted itself to circumstances, and has become much more a bush than a forest bird.

In Mau Forest, at altitudes between 7500 and 9000 feet, it is, or used to be, plentiful at the Eldama Ravine, in the glades and among the bamboos on the western edge, extending westward through the clumps of mixed junipers and bamboos, to the eastern edge of Nandi. At the Eldama Ravine, and along the Sclater and Londiani cart-roads, it was almost invariably found just outside the forest, or in the bush closely adjoining it, and retreated into the forest on being disturbed. It is generally found in pairs, or in small family parties of four to five. Dr. Granvik observed as many as ten to twelve together on Mt. Elgon. In the early morning and after 4 p.m., it leaves the thick covert, whether forest or bush, to feed, and if quite undisturbed will remain outside or close by or under the shelter of a patch of bush throughout the day. When disturbed it either runs or flies straight for the thickest cover, and frequently settles in a small tree or bush. It is difficult to flush, and when it is made to rise by a dog or beaters, it has an annoying habit of skimming along just clear of the top of the bush, and only for a short distance—often too near to shoot—before dropping down again.

In Kikuyu, it breeds between July and August, and again in January or February. Eggs from Nairobi are cream colour, minutely speckled with white, and measure  $41.5 \times 31.5$  mm. Others from Nandi are dark cream to buff, minutely flecked, and spotted with white, or quite plain, and measure  $38-43 \times 31-35$  mm.





VII. FRANCOLINUS JACKSONI

*Francolinus jacksoni*.

## JACKSON'S FRANCOLIN.

## Plate VII.

*Francolinus jacksoni* O. Grant.

Sharpe's Hand List, Vol. I. p. 25.

Reichenow's Vögel Afrikas, Vol. I. p. 471.

Praed's African Francolins, *Ibis*, 1922, p. 135.

Sclater's Systema Avium Ethiop., Part I. p. 89.

*Description: Male.* Forehead, lores, and fore part of cheeks dull red. Chin and upper part of throat white, with narrow rufous shaft-streaks; superciliary-stripes, hinder part of cheeks, and lower part of neck the same, but with wider rufous shaft-streaks; top of the head and nape reddish-brown, with narrow black and grey vermiculated margins; ear-coverts light brown; neck, chest, breast, and belly bright chestnut, each feather margined on both sides with white, speckled in some with black; feathers of the upper back with darker chestnut centres, and black and grey vermiculated margins, the chestnut gradually disappearing towards the lower back and on the shoulders, where the whole feathers are finely vermiculated with black and grey, and only brownish-red towards the middle; lower back, wings, and rump brown, inclining to sienna on the outer wing-coverts, upper tail-coverts, and tail. Feathers of the sides, flanks, lower belly, and under tail-coverts with dark chestnut centres, widely margined with black and grey vermiculations; a pair of strong spurs, supplemented by a second blunt knob; iris brown, eyelids



coral-red; bill dark coral-red; feet coral-red in front, hinder part dusky. Length, 432–451 mm.; wing, 220–230 mm. Weight, 2½ lb. (Lowe).

*Female.* Similar but smaller. Length, 413–426 mm.; wing, 201–212 mm.

*Distribution.* Kenya, highlands only.

*Recorded Localities.* Mianzini (8000 feet), Kijabi, Aberdares (10,000 feet), Il-polossat, Subugo L'eriko. Mt. Kenya (Mackinder). Mau (9100 feet) (Cosens).

*Notes.* Jackson's Francolin is confined to the Highlands of the Colony, and to altitudes between 7500 and 10,000 feet. It is the largest of the genus found in the two territories, a cock in freshly moulted plumage being a truly magnificent bird. It is mostly found in, or in the near vicinity of, the bamboo zones, when it is met with singly, in pairs, and small coveys of four to six. It is, or was, very plentiful between Kijabi and the Aberdares, northward to Il-polossat, and on the Naivasha–Nyeri road, but it is far from easy to obtain. Inside the bamboo it skulks and creeps about, and is difficult to detect in the dim light; outside in the open it is a rapid runner, only equalled by the "Spurfowl" (*P. l. infuscatus*), and will rarely rise unless hard pressed. Early morning or evening, when feeding outside, are the best times to look for it, and the gun should walk quietly along, and close to the bamboos, with a couple of beaters on his outer flank, and take it as it makes for covert. Another and very effective method was to stroll along the Naivasha–Nyeri road a mile or two behind the porters, when all was quiet, and the birds left the dense covert on each side. A road is a great attraction

to most game birds; they can dry, dust, and sun themselves, and with this bird within recent years the grain dropped by the Akikuyu food-convoys to the Rift Valley has proved a further attraction. On one occasion considerable numbers were found in the thick clumps of giant nettles that mark the sites of the old Masai *manyattas* on the Kiangop plain, close up to the foot of the Aberdare range; they, however, defied myself, gun-bearers, and dog, and only a line of elephants could have dislodged them from such fearsome covert. When flushed it often perches on trees or bamboos. On July 7th one of my collectors found a nest with three eggs, just within the edge of a large clump of bamboos, eight miles east of Kijabi Hill; from their size there can be little doubt that they are this bird's.

*Francolinus lathami schubotzi*

SCHUBOTZ'S FOREST FRANCOLIN.

*Francolinus lathami schubotzi* Reichen.

Reichenow J. f. O. 1912, p. 320 : Welle River.

van Someren, *Ibis*, 1916, p. 218.

Praed's African Francolins, *Ibis*, 1922, p. 106.

Sclater's Systema Avium Ethiop., Part I. p. 78.

*Description : Adult Male.* Top of head brown, fading into grey on the forehead and margined with white, upper back olive-brown, with wide white shaft-stripes, edged externally with black; middle-back, scapulars, and wing-coverts olive-brown, widely edged with chestnut, and with white shaft-stripes; lower back, rump,

and upper tail-coverts olive-brown, with paler margins; tail olive-brown, barred and marked with darker brown. Primaries and primary-coverts dark brown, the middle part of the outer webs of the primaries margined with paler brown; a black band commences on the lores, and passing through the eye circumscribes the top of the head, dividing it from the grey cheeks, ear-coverts, and sides of the neck; chin, throat, and front of neck black; chest and breast black with white, heart-shaped spots; sides and flanks olive-brown, with white black-edged shaft-stripes; belly and under tail-coverts white barred with black; iris brown; bill black; feet yellow (van Someren). Wing, 146–150 mm.

*Adult Female.* Differs from the male in having the head and upper parts olive-brown; the upper back faintly and irregularly barred with rufous and with white shaft-stripes, many of the wing-coverts blotched with black; cheeks and sides of neck and ear-coverts rufous; chest olive-brown and with small white spots edged above with black; breast white or buff, edged above with black and margined with pale olive-brown; iris brown, bill dark brown; feet yellow (van Someren). Wing, 141–148 mm.

*Distribution.* Uganda.

*Recorded Localities.* Mabira Forest. Bugoma, Budongo, Lugalambo (van Someren).

*Notes.* Schubotz's Forest Francolin has, up to the present, been obtained only in the dense primeval forests of Uganda and Bunyoro; but as the type came from the Belgian Congo, it is not improbable that it will be found in other intervening forests, such as the

Mpanga in Toro, when it has been systematically worked. Dr. V. G. L. van Someren gives an account of its habits in the *Journal* of the East Africa and Uganda Natural History Society for 1917, p. 139, and he writes as follows: "With regard to the habits of these birds, little is known. They are birds of the dense forest, which fact would account for them being overlooked so long in Uganda. They are shy, timid, and difficult to procure. Owing to their partiality for thick forest, these birds do not fly swiftly nor far, but trust to their running powers to avoid pursuit. My head collector reports that the best way to find them and keep touch with these birds is with a good hunting dog. They are usually found in pairs, or small coveys. I have not heard them calling, but they are said to utter a low, whistling note when feeding amongst fallen leaves. Breeding apparently takes place in May and June, during which months females have been collected with swollen ovaries and dilated oviducts. Young birds in first plumage have been shot in September."

Two examples, obtained by my collector, were shot as they came out of the thick cover to feed on a twenty-yards length of forest track that had been purposely cleared of grass and weeds, and then sprinkled with *wimbi* or *mtama* grain. This was done in several places, to save time, and only when the grain had disappeared was the track resprinkled; the collector then sat in hiding at one end, and waited for the birds to appear. It is a very effective way of procuring such birds as the Crested Guinea-Fowl, Forest Doves (*Turturæna* and *Aplopelia*) and other shy forest-dwellers.

*Francolinus nahani*.

## NAHAN'S FOREST FRANCOLIN.

*Francolinus nahani* Dubois.

Dubois, Ann. Mus. Congo, Vol. I. 1905, p. 17, pl. X.  
van Someren, *Ibis*, 1916, p. 219.

Praed's African Francolins, *Ibis*, 1922, p. 107.

Sclater's Systema Avium Ethiop., Part I. p. 78.

*Description : Adult Male and Female.* Crown of head dark brownish-black, feathers elongated; posterior half of superciliary stripe black and white; ear-coverts brownish-black, or speckled with white; cheeks, sides of throat, and neck whitish, each feather having pear-shaped terminal black spots, giving the whole a mottled appearance; mantle and scapulars brown with black vermiculations and a black shaft-stripe; rump and tail-coverts brown with longitudinal and transverse vermiculations; coverts brown with black centres, towards the extremity of the outer web there is a conspicuous buff spot; secondaries black with irregular transverse pale brown markings; primaries dark brown with pale margins to the outer web; crop and breast black with two longitudinal white irregular stripes; lower breast white with central black streak and narrow black margins; flanks black with irregular roundish white spots towards the margins; abdomen greyish-black with whitish cross-bars. Under tail-coverts glossy black with a few buff spots; iris brown, bare skin round eye crimson; bill black, base crimson; toes black (van Someren). Wing, male, 141-149 mm.; female, 137-144 mm.

*Distribution.* Uganda.

*Recorded Localities.* Mabira and Bugoma forests.

*Notes.* Nahan's Forest Francolin is confined exclusively to the dense forests, and so far has only been obtained in those of Mabira and Bugoma; but no doubt it will also be found in Budonga and Mpanga forests. Dr. V. G. L. van Someren in the *Journal* of the East Africa and Uganda Natural History Society for February 1918, pp. 199-200, writes: "Very little is known regarding the habits. My collector reports that these birds go in pairs and are generally seen with Guinea-fowl, and indeed they mistook these birds for young of this species until a specimen was procured. The mistake was quite pardonable on account of the poor light which filters through the top of the thick-foliaged trees. I myself have only seen these birds on one occasion; they were feeding under the undergrowth, and their presence was detected on account of the rustling of the dead leaves on the ground as they scratched and hunted for seeds and snails, which food appears to be their chief diet. They were shy and most difficult to procure."

My collector Andreyra obtained eight examples in Bugoma forest by adopting the strategy explained under *F. l. schubotzi*.

*Pternistis afer leucoparæus.*

FISCHER'S BARE-THROATED FRANCOLIN.

*Pternistes humboldti* Peters.

Sharpe's Hand List, Vol. I. p. 25.

Reichenow's Vögel Afrikas, Vol. I. p. 462.

*Pternistes afer leucoparceus* Fischer and Reichen.

Slater, Bull. B.O.C. No. CCLXI. Vol. XLI. p. 134.

Slater's Systema Avium Ethiop., Part I. p. 90.

*Description: Male.* Forehead black; indistinct stripe above the eye black and white; top of the head brown; rest of the upper parts umber-brown with black shaft-stripes; feathered part of the sides of the face and throat white, entirely surrounding the naked skin of the chin, throat, and fore-neck; sides of the neck black; chest and flanks whitish-grey, narrowly margined with black and with black shaft-stripes; breast and abdomen black; iris brown; bill and bare skin of face and throat dull dark red; feet bright coral-red. Length, 300 mm. (dry skin); wing, 198 mm.

*Female.* Resembles the male, but is slightly smaller, and differs in having the sides of the neck white, with a wide black band down the centre of the feathers; some of the feathers of the breast and abdomen have narrow white shaft-stripes.

*Distribution.* Kenya, coast regions.

*Recorded Localities.* Mkumbi, Mtangani, Mashundwani, Witu. Tana River (Hunter). M'koi (Turner). Near Mombasa (Belcher).

*Notes.* Fischer's Bare-throated Francolin belongs to the group of game birds that is commonly, but erroneously, referred to as "Spur-fowl." It is found in the Lamu and Witu districts, in the bush on the outskirts of the forest, and is plentiful in the bush-veldt on the banks of the Lower Tana River. It was never met with in the vicinity of Merereni, where its place was taken by the common yellow-throated bird (*P. l.*

*infuscatus*). A fine cock bird, one of a pair, was obtained, and other pairs were seen, in a patch of bush just outside Witu forest, in June. It is a great runner, like all "Spur-fowls," and is difficult to flush; and its harsh grating call is characteristic of the family.

It breeds between June and August. A nest of a few grass stems and leaves, in a depression scratched by the birds, was well hidden under a small shrub at Loitu, on June 8th. It contained two fresh eggs, pale buff, with tiny speckles, and confluent blotches of dull purplish-lilac. They measure 39.5-40 × 29.5-30.5 mm.

*Pternistis cranchi intercedens.*

NYASA VERMICULATED FRANCOLIN.

*Pternistes cranchi* Leach.

Sharpe's Hand List, Vol. I. p. 26.

Reichenow's Vögel Afrikas, Vol. I. p. 457.

*Pternistes cranchi intercedens* Reichen.

Sclater's Systema Avium Ethiop., Part I. p. 91.

*Description: Male.* Top of the head brown; stripe above the eye and sides of the face black, narrowly margined with white; feathers of the neck, mantle, chest, and sides finely mottled with black and white; rest of the under parts umber-brown, finely mottled and dotted with black, and with darker brown shaft-stripes; quills brown; breast and abdomen like the chest, but each feather widely margined with chestnut; vent and under tail-coverts brownish-buff, mottled with black; tail brown, faintly dotted with black; iris brown; bill dark coral-red, bare skin of face and throat dull coral-



red; feet dark coral-red. Length, 362-395 mm.; wing, 185 mm. Weight, 20-24 oz.

*Female.* Differs from the male in having the feathers of the back of the neck brown edged with white, and with dark shaft-stripes; feathers of the breast and abdomen much less conspicuously edged with chestnut; feet orange-red. Length, 327-343 mm.; wing, 172 mm. Weight, 15 oz.

*Distribution.* Kenya; Uganda.

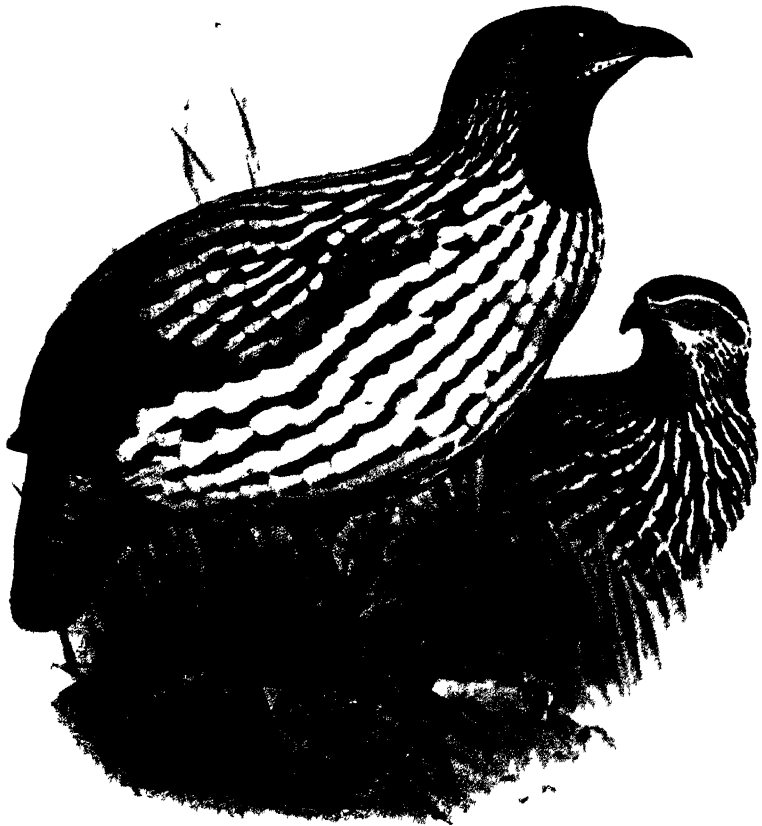
*Recorded Localities.* Nyando Valley, Fort Ternan, Mohoroni, Kibigori, Kibos, Malongo, Lyantonde, Sanga, Mbarara, Rusassa, Kisasa, Makole. Kalwanga, Fort Portal (van Someren). Mohokya (Woosnam).

*Notes.* The Nyasa Bare-throated or Vermiculated Francolin is, or was, found in fair numbers in the Nyando Valley between Fort Ternan and Kibos. It frequented both the foot-hills and the thick bush in the valley, and was rarely met with more than a couple of hundred yards or so from a stream; and, like *F. s. maranensis*, it invariably sought refuge in thick covert when disturbed. It was generally met with in pairs, or three or four together. It is probably a rare bird now, and no doubt its harsh, grating, and far-sounding voice has led, to no small extent, to its decimation at the hands of Europeans and the local native trappers.<sup>1</sup>

It is the commonest of all the game birds in Buddu

<sup>1</sup> In this Francolin we have another instance of a break in the range of a bird, analogous to that of *F. s. zappeyi*, and apparently due to the same cause, the agency of ruthless man. In both cases, the survivors appear to have found refuge by following rivers into uninhabited and neutral territory, and came to a halt at practically the same altitude, about 5500 feet.





VIII | PTERNISTIS LEUCOSCEPUS LEUCOSCEPUS  
| PTERNISTIS LEUCOSCEPUS INFUSCATUS

and Eastern Ankole, and again in Toro; but it does not appear to range north of the Kampala-Fort Portal road. It is found on the rolling grassy hillsides, sparsely dotted with thorn trees, bushes, and ant-hills. Like the rest of the genus, it is a great runner, and also a skulker, and it has the same harsh, grating voice as the common yellow-throated bird in the Colony.

It is mainly due to its call that it so frequently falls a victim to the gun. As it usually calls from an ant-hill, tree stump, stone, or bare patch of ground, it is easily located; but if it sees or hears the approaching danger it runs to the nearest patch of covert and there squats. When walking it up along a hillside, it is as well to have a couple more beaters on the upper flank than on the lower, as it has a marked tendency to fly down-hill, and thereby give faster and more sporting crossing shots, and more likely to lead to a clean kill. It is very tough, and shots from behind lead to a large percentage of wounded and lost birds. It is mostly in pairs in January and February, but eggs, three and two, have only been taken in November and July. The eggs are pale buff, some quite plain, but mostly freely speckled and spotted with white. They measure 38.5-40 × 32.5-33 mm.

*Pternistis leucoscepus leucoscepus.*

BORAN YELLOW-THROATED FRANCOLIN.

Plate VIII. Fig. 1.

*Pternistes leucoscepus* Gray.

Sharpe's Hand List, Vol. I. p. 26.

*Pternistes leucoscepus leucoscepus* Gray.

Reichenow's Vögel Afrikas, Vol. I. p. 454.

Lönnerberg's Birds, Swedish Zoological Expedition,  
1911, p. 52.

Slater's Systema Avium Ethiop., Part I. p. 91.

*Description.* Top of the head darkish brown, most of the feathers with whitish-buff shafts; back and sides of the neck brown, each feather margined with white, and with reddish-buff shaft-stripes shading into buff at the extremity; most of the upper parts pale brown with grey margins, with white shaft-stripes, widest at extremity; primaries, primary-coverts, and secondaries brown, the outer primaries with the outer web margined with buff, and with a large patch of the same colour on the outer half of the inner web; ear-coverts bare, sides of face white, with brown shafts; chest, breast, and thighs dull brown, with very wide shaft-stripes; abdomen and flanks the same, but the brown is mostly dull reddish-chestnut; tail rufous buff, vermiculated with black; under tail-coverts buff, dotted with black; iris brown; bill brown, gape reddish; naked skin round eyes, chin, and throat scarlet, fading into yellow on the neck. Wing, 205 mm.

*Distribution.* Kenya.

*Recorded Localities.* N. Uaso Nyiro, Moyale, Wajheir. Njoro (Lönnerberg).

*Notes.* A bird of the hot, dry, and inhospitable bushveldt, but generally found in the vicinity of water; and, no doubt, it is very similar in habits to the more

familiar *P. l. infuscatus*. My collector obtained it at Moyale and Wajheir, and the N. Uaso Nyiro.

*Pternistis leucoscepus infuscatus*.

YELLOW-THROATED FRANCOLIN.

Plate VIII. Fig. 2.

*Pternistes infuscatus* Cabanis.

Sharpe's Hand List, Vol. I. p. 26.

*Pternistes leucoscepus infuscatus* Cabanis.

Reichenow's Vögel Afrikas, Vol. I. p. 455.

Sclater's Systema Avium Ethiop., Part I. p. 92.

*Description.* Top of the head dark brown with dark grey margins; streak above eye and cheeks pale buff; the feathers under the eye with pale brown centres; neck brown with white edges; shoulders brown with chestnut centres; rest of the upper parts dark brown with white and buff shaft-stripes; primaries, primary-coverts, and secondaries brown, the outer primaries and outer webs margined with buff, and with a large patch of the same colour on the outer half of the inner web, secondaries thickly vermiculated with buff on the outer web; tail vermiculated with brown and buff; chest, breast, and under parts dark brown with pale buff centres, the feathers of the flanks shaded with chestnut; iris hazel, dark brownish-horn, bare skin round eye and chin bright red, throat bright lemon-yellow; feet dark shiny brown. The colour of the bare skin of the throat varies a good deal in the amount and intensity. Length, 426–432 mm.; wing, 212–216 mm.

*Female.* Similar to the male, but smaller. Length, 419 mm.; wing, 193–197 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Merereni, Voi, Taveta, Doinyo Narok, Makindu, Kima, and Kibobo Rivers, Simba, Kapiti Plains, Stoney Athi, Nairobi, Ngong to Mt. Kenya, Embu, Emberre. Lower Molo River, Baringo. Serengete Plains (Praed). Machako's (Hinde). Kilima Thiki and Athi River (Gurney). Narossura, and Mt. Moroto (Cosens). Fort Hall, Nyeri, Kyambu (van Someren). Juja, Punda Milia, Kagio, Kutu Meru, and Lekiuundu River (Lönnerberg). Useri River (Hunter).

*Notes.* The Yellow-throated Francolin is the well-known but misnamed "Spur-fowl." It is very widely distributed throughout the Colony, but apparently absent from localities above 7000 feet in altitude. In Uganda territory it was obtained at Mt. Moroto by Captain Cosens. Throughout its range it is for the most part confined to the dry, open bush-veldt away from the proximity of mankind; but in Kikuyu it is common in the vicinity of cultivations from Ngong to the eastern slopes of Mt. Kenya, and to a lesser extent near Machakos. It is particularly plentiful near Taveta, at Makindu, and towards Simba. At Merereni it must rely entirely on dewdrops for its water supply during the dry season, as there is no surface water; elsewhere it concentrates in the near vicinity of rivers and watercourses. On the coast, near Taveta, and again near Baringo, it is very partial to dry, sandy areas dotted with low clumps of the tooth-brush shrub (*Salvadora persica*). This parti-

cular shrub is very dense, with a thick canopy of dark green fleshy leaves which afford the bird such excellent cover, during the midday heat, that it not infrequently has to be prodded out with sticks to force it to quit.

Except during the breeding season, this Francolin is generally found in coveys of four to six, and occasionally up to a dozen or more. It is a champion runner—it runs very erect with head well up. It is very difficult to flush without beaters, is very tough, and will carry off a lot of shot when going straight away from the gun. Its call is loud and grating, and is frequently heard throughout the day in dull weather, and always after a shower of rain. It breeds between April and August, and again in October and November. The nest is well hidden under a small bush or in scrub; one was found within 2 feet of a well-used native footpath. It was a mere scratched-out depression lined with dry grass. The eggs are three to five in number; one lot of six and another of seven, brought in by natives, may or may not have been, in each instance, two clutches mixed together, in spite of assurances to the contrary. The fact that both lots were fresh lends colour to the probability that they were single clutches, as one was found on August 8th, the other on October 2nd. They are pointed oval, cream to pale buff, freely speckled with white, and measure 42–44 × 34–35 mm. The shell is very hard and stone-like, and requires a small cross-cut with a file before the drill will make any impression.

The Yellow-throated Francolin found on the coast is, I believe, more or less isolated, as it was only met with at



Merereni, and it may prove to be a smaller and local race. It was plentiful on the open sandy flats bordering the creek towards Mambrui, freely dotted with bushes and the tooth-brush shrub, and it was these latter that were so much favoured as shelters. While stalking bigger game, it frequently happened that this bird proved as annoying as the plover (*S. lugubris*) can be. On reaching a convenient patch after a laborious crawl, one or more were often found already in possession, and declining to give way and move off quietly, showed their resentment at my intrusion by loud chucks and cackles, and, naturally, proclaimed to all around that there was something amiss. In May and June it was in small lots of three or four, and coveys of seven to ten or more. In July it was pairing.

*Pternistis leucoscepus muhamed-ben-abdullah.*

MUHAMED-BEN-ABDULLAH'S YELLOW-THROATED  
FRANCOLIN.

*Pternistes leucoscepus muhamed-ben-abdullah* Erl.

Erlanger, Orn. Monasb., Vol. XII., 1904, p. 97.

Claude Grant, *Ibis*, 1915, p. 21.

Sclater's *Systema Avium Ethiop.*, Part I. p. 91.

*Description.* Similar to both *P. l. leucoscepus* and *P. l. infuscatus*, having the under parts of the former, and the upper parts of the latter (Claude Grant).

*Distribution.* Kenya.

*Recorded Locality.* El Wak, Lorian flats (Erl.).

*Notes.* The type of this race of Yellow-throated

Francolin was obtained by Erlanger between El Wak and Bardera, and he again met with it in the vicinity of Lorian. It is, no doubt, very similar in its habits to *P. l. leucoscepus*, and *infuscatus*.

*Pternistis leucoscepus keniensis*.

MOUNT KENYA YELLOW-THROATED FRANCOLIN.

*Pternistes leucoscepus keniensis* Mearns.

Mearns, Smiths. Misc. Coll. Vol. LVI., No. 20, 1911,  
p. 1.

Claude Grant, *Ibis*, 1915, p. 21.

Sclater's Systema Avium Ethiop., Part I. p. 92.

*Description.* Differs from *P. l. infuscatus* in its generally darker coloration; in the absence of transverse bars on the wing and tail, which instead of being barred are minutely speckled and vermiculated; in much narrower white borders to the feathers of breast and sides, those of the flanks having white shaft-stripes, and in having the thighs and crissum darker and without pure white edges. Adult males have the iris brown; bill olivaceous-brown, orange at base below; feet and claws black, naked sides of face and chin bright red; throat bright yellow. Females are similar but with less orange at base of bill below. Wing, 204 mm.

*Distribution.* Kenya.

*Recorded Localities.* Western slopes of Mt. Kenya, (6000–7000 feet), Njoro, or Kasorongai River (6500 feet) (Mearns).

*Notes.* No doubt similar in habits to *P. l. infuscatus*,

and probably only a darker, high-ground form of the latter, whose range is continuous from Nairobi to Fort Hall and Nyeri.

*Coturnix coturnix coturnix.*

COMMON QUAIL.

*Coturnix coturnix* Linn.

Sharpe's Hand List., Vol. I. p. 31.

*Coturnix coturnix coturnix* Linn.

Reichenow's Vögel Afrikas, Vol. I. p. 506.

Slater's Systema Avium Ethiop., Part I. p. 93.

*Description.* Differs from *C. c. africana* in having the lores, sides of the head, chin, and throat white, and in being slightly larger. Wing, 107–112 mm.

*Distribution.* Kenya.

*Recorded Localities.* Kisumu (van Someren). Serengeti Plain (Meinertzhagen).

*Notes.* The Common Quail has, so far, been recorded from the Colony on two occasions only; but this does not necessarily imply that it is quite so rare a straggler from the north as it appears to be. A bird that lies so close, and is so difficult to flush, might quite easily be overlooked, or mistaken in the field for the resident bird (*C. c. africana*).

*Coturnix coturnix africana.*

CAPE QUAIL.

*Coturnix africana* Temm and Schleg.

Sharpe's Hand List., Vol. I. p. 31.

Reichenow's Vögel Afrikas, Vol. I. p. 506.

*Coturnix coturnix africana* Temm and Schleg.

Sclater's Systema Avium Ethiop., Part I. p. 93.

*Description: Male.* Top of the head black, all the feathers tipped with brown, or reddish-brown, a white or pale buff stripe down the middle of the head; feathers of the mantle sandy or reddish-brown, each with a wide buff black-edged shaft-stripe tapering to a point and with a wide black bar or blotch on one or both webs. The scapulars and feathers of the back, rump, and upper tail-coverts are very similar to the mantle, but the ground colour is generally black with narrow V-shaped transverse bars of dirty or reddish-white, and the shaft-stripes are wider and confined to a line of feathers down each side of the spine. Lores, sides of the head, chin, and throat bright rufous-chestnut, the chest washed with same; a reddish- or blackish-brown band commences behind the upper angle of the nostril and passes through the eye and over the ear-coverts; a black, or sometimes reddish band extends backwards to behind the eye from the angle of the gape, a black anchor-shaped mark commences on the chin and passes down the middle of the throat, the arms curving upwards to the ear-coverts, the chestnut of the chin and throat usually separated from the chest by an ill-defined band of black and rust-coloured spots; rest of under parts whitish-buff; sides and flanks reddish-buff, spotted with black, and with wide white black-edged shaft-stripes. Tail-feathers black, tipped with whitish and barred with buff; iris hazel, bill black; feet yellowish-white. Length, 185-197 mm.; wing, 98 mm. Weight, 2-2½ oz.

*Female.* Differs from the male in having no black band down the middle of the throat, only the arms of the anchor-shaped mark being somewhat imperfectly defined, and the chest more or less spotted with black; feet flesh colour. Length, 188–203 mm.; wing, 109 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Nandi, Londiani, Nairobi, Fort Smith, Kasenye, Toro. Embu, Kyambu (van Someren). Kikuyu (Cosens).

*Notes.* The Cape Quail is a scarce and local bird. It is a sub-species of the Common, or European Quail (*C. c. coturnix*).

In Nandi, there were a fair number in May, in the near vicinity of the old Government Station at Kamsikak, and four cock birds were obtained. Another cock bird was also obtained in May at Londiani. It was again met with and obtained near Nairobi, on the Ngong road, on November 28th and January 5th. The latter were cock and hen birds respectively, and both were in full brooding condition. Wherever found, it has always proved most difficult to flush. Its call, a chirrup, is similar to that of *C. delegorguei*, and I venture to suggest that it is a ventriloquist. Appended is a note on the subject dated Nandi, May 31st: "This bird is clearly a ventriloquist and possesses the power of throwing its voice for a longer or shorter distance from the spot where it is actually squatting. This evening, after a shower of rain, Bagge and self with four men heard one calling about thirty to forty yards away, and, as we thought, the exact spot was marked. Advanced and beat the

grass with switches for a radius of twenty yards, but failed to flush the bird. Call began again, apparently on, or at the base of, a grass-covered ant-hill twenty yards away on our left; approached quickly, and beat all around but no results. Men began to murmur something about *Shatani* (the Devil), when the call commenced again, anything between eighty and a hundred yards away. This time approached cautiously, and when within a dozen to fifteen yards of, to us, the exact spot, we ran in and beat vigorously all round; no result. Were returning to cart-road, when the call began again, not more than twenty yards away. Still no result; men quite convinced that it was *Shatani*; so were we. Cannot believe that there were four birds, that they were unable to rise on account of being wet, and that we had walked over them." On two other occasions an exactly similar coincidence occurred near Nairobi, but there was no rain to account for it, and the grass was quite dry. On each occasion a single bird was flushed and bagged, but both of them rose far short of what we (self and four beaters) regarded as the exact spot.

It breeds in Kikuyu, in January and February, in the vicinity of Fort Smith. My old gun-bearer Bilal Stanley, who lives there, brought me two clutches of six and nine eggs, the latter on the point of hatching, on January 20th; and on February 10th the following year four more clutches of six, three, six, and five eggs. Professor Lönnberg, of the Swedish Expedition, states: "Two male specimens shot outside Nairobi, in the beginning of January 1911. . . . One, a breeding male,

with strongly swelled testicles, is darker than the other, which is probably younger, but no doubt also breeding, as the testicles measured 16 mm. in length." Dr. V. G. van Someren writes in the *Ibis*, 1916, p. 221 : "Sometimes plentiful. The male shot in January had very large testes and was probably breeding."

The eggs are a pointed oval, of various shades of creamy-white, yellowish-buff, and greyish-yellow, marked with deep olive-brown and blackish-brown. In some, the markings are small specks and irregularly-shaped spots, with a few small blotches. In others, the markings are mostly blotches of considerable size, frequently confluent. They measure from 28-31 × 21-24 mm.

*Coturnix delegorguei*.

HARLEQUIN QUAIL.

*Coturnix delegorguei* Deleg.

Sharpe's Hand List, Vol. I. p. 31.

Reichenow's Vögel Afrikas, Vol. I. p. 507.

Sclater's Systema Avium Ethiop., Part I. p. 93.

*Description* : *Male*. Differs from the male of *C. c. africana* chiefly in having the general colour of the upper parts, including the wing-coverts, blackish-brown; the black pattern of the throat more strongly marked; the general colour of the sides of the neck and the rest of the under parts chestnut; a large black patch in the middle of the chest and breast, and the feathers of the sides and flanks black down the centre; iris brown;

bill black; feet dusky-yellowish-white to brownish-flesh colour. Length, 168–181 mm.; wing, 93 mm.

*Female.* Differs from the female of *C. c. africana* in the much darker colour of the upper parts, in having the under parts rufous-buff or dull chestnut washed with dusky on the chest, most of the feathers with a pale dark-edged shaft-stripe, and the feathers of the sides mottled and barred with black and buff; iris bright hazel to reddish; bill dusky-brown, in some the lower mandible is horn-blue; feet ochreous-white. Length, 171–196 mm.; wing, 98 mm. Weight, 2–2½ oz.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Mombasa, Teita, Taveta, Simba, Suttan Hamu Kipiti, Athi, Nairobi, Eldoma Ravine, N. Uaso Nyiro, Nandi, Nyando Valley, Kavirondo, Entebbe, Abela, Mbarara, Butiaba, Amala River (Cosens). Jinja, Sio River, Kano, Kisumu (van Someren).

*Notes.* Delegorgue's, or the Harlequin Quail, is the common bird of both Kenya and Uganda, but it is very much more plentiful in the former. It is subject to local migrations, and these are erratic in the matter of dates, but appear to be constant in the matter of direction, north and south. My notes show that it was "extremely plentiful near Taveta" (in January, 1887); "very common at Mumias" (in November and December, 1889); "in great numbers on the western foot-hills of Ndara in Teita" (in December, 1891); "vast numbers on both sides of the Molo river" (in September, 1896). Other notes show movements to be erratic, and it is difficult to suggest a reason. For instance, "quite



plentiful on Mombasa Island" (in November, 1901), but during the same month of the following year "only an odd bird or two." Again, "in great numbers and large bags made on the Athi plain" (near Nairobi in July, 1902). The following year, "did not appear"; "great numbers, June 13th-July 29th, 1904," and "a few odd birds, mostly cocks" (in May, 1905). But all the above records pale to insignificance before "enormous congregation, five miles north of Sultan Hamud. Currie and self, on cow-catcher of goods train, estimated not less than two hundred birds were on the wing at one moment. Stopped train, and in about a quarter of an hour to twenty minutes bagged eleven and a half brace, lost a few others" (on March 28th, 1910). These birds were no doubt locally bred, as on February 18th it was noted "many coveys of half-grown 'cheepers' seen close to line, frightened by the train between Simba and mile 252." Apart from the annual influxes on a large scale, this quail is very widely distributed, and may be met with in small numbers throughout the Colony in places where the grass is short, and in or near native cultivations, particularly in Kavirondo and Teita. In Uganda, it is widely distributed throughout the Protectorate, but in small numbers. In Kavirondo the natives catch, with the aid of decoys, great numbers of this bird for their own consumption, and for sale; their method is as follows. The decoys are kept in neatly-made pear-shaped baskets, each containing a single bird. These baskets, up to a dozen in number, are attached to a long pole, and from a distance and against the sky-line look

for all the world like a giant sprig of foxglove. When the quails arrive, a pole with only one or two decoys is fixed in position at the junction of two or more rarely-used sheep and goat, or native footpaths. At short intervals of ten to fifteen feet, a wisp of grass, on each side of the path, is twisted and tied together so as to form an arch over the path. Through the top of this arch and into the ground small sticks are inserted about half an inch apart, to form a barrier, a small space or doorway being left in the middle, and just wide enough for a quail to pass through. In this doorway is suspended the deadly noose of native-made twine. The wild birds, on hearing the chirruping-call of the decoys, at once begin to work through the grass towards the spot, and on coming to one of the paths and finding that it leads in the right direction, like many other animals—whether elephant or mouse, lark, pipit, or lizard—prefer to use a well-beaten track, and following it until they come to the barrier, get caught. When I first visited Kavirondo in 1889, the natives practised the most hideous cruelty on the wretched little captives, as they at once broke both wings and legs to prevent escape, tied them by the legs in bunches of twenty or so, and then brought them into camp for sale. Up to that time the only purchasers had been Arab and Swahili traders, who would not buy anything, bird or beast, that had not been killed in the orthodox manner by themselves by cutting the throat; and of course dead quails were unsaleable. Now, they bring them to the market in the same shaped baskets in which they keep the decoys. The decoys were fed on

wimboi and termites, and the latter were collected in a very ingenious but simple manner. Sheaves of long, straw-like dry grass were placed in an upright position, and left until the termites found them, ate most of the centres and filled the cavities with their earth tunnels. The natives, in due course, went round, shook out the termites into a basket, and replaced the sheaf to attract more. As a receptacle for water, a large snail shell was used. In these days cultivation in Kavirondo is so vastly increased, and native ideas are so advanced, that it was noted during a visit to Mumias in June 1909 that the decoys were placed on cultivations, and on fallow land, and artificial "leads" of cut scrub and weeds laid in parallel lines, and about eighteen inches apart, were substituted for footpaths; and in several of the decoy baskets the snail shell had given place to the lid of a tobacco, or small potted-meat tin. It is a bird that very soon adapts itself to captivity, and becomes very tame. The majority of the birds caught are cocks.

On one occasion an old Kavirondo friend presented me with two baskets containing ten quails, seven of which were cocks, but as I was on safari and had not the heart to kill and eat them, they were released in the early morning of the third day before the dew was off the grass. They had probably been in captivity for a week at most, but in that time had become so remarkably tame that on opening the baskets one after another walked out, at once began to pick about and to drink the dewdrops; and two of them actually allowed me to pick them up after being free for a quarter of an hour. On another

occasion a dozen to fifteen were taken over to Entebbe, and kept for about a month on the lawn, in a movable enclosure made out of chop boxes and covered with small-mesh wire-netting. These birds also became very tame, and all went well until one night, whilst sitting on the verandah, a curious beating on the wire-netting was heard, and in the belief that a cat or mongoose had effected an entrance, a lamp was sent for and an investigation made; but all was quiet and most of the birds were snugly bunched together. Within half an hour a similar disturbance occurred; and again twice the next night, and I began to think that an owl might be the cause. Next morning, however, the mystery was cleared up, as many of the birds had the feathers of the forehead missing, and the base of the bill bruised and bleeding, through jumping up at the wire-netting in their attempts to escape; there were also tiny feathers and blood-stains on the wire-netting. That they were impelled to escape by an overwhelming desire to obey the instinct that prompts migration, there can, I believe, be no doubt. The enclosure was therefore tilted up, and the birds given their freedom; and again several of them allowed themselves to be picked up without a struggle or sign of fear. In about an hour they had all crept away into a patch of long grass and remained there throughout the day until 6 p.m., when, on going to see if they were still about, they all got up with a whirr, and flew straight away over a belt of trees, heading south. It is interesting to note that as I approached the patch of grass in which they were lying, they got up on the left, and flew across

my front, and not straight away from me. This would appear to indicate that they had already decided on the direction to take.

The best time for shooting this quail is between 3.30 p.m. and dusk. In the morning, when the dew is on the grass, or after rain, it is very difficult to flush, and will skulk or creep about in the grass like a mouse rather than take wing; during the heat of the day it is so sleepy that beaters must walk very close together and use switches freely in order to make it get up. As an instance of how close this bird will squat at times, one actually allowed itself to be trodden on by Mr. Loveridge. It is easy to hit, whether going away or crossing to the right or left, and the sport it affords is proportionate to the gun used; a double .410 or 28-bore and No. 10 shot afford the best, beyond a doubt. A 12-bore gives the bird no chance; its use means a certainty, and is little less than butchery. Its chirruping call is unmistakable, and is heard morning and evening and after a shower of rain. The call is generally the first indication that "the quail are in." A variety of grass seeds form its principal food, but it also eats a large quantity of caterpillars and insects. Dew and rain-drops are amply sufficient for quenching its thirst.

Notes on the breeding of this bird in Kenya are as follows: "Captain Mackay, of the 3rd King's African Rifles, informs me that in Jubaland he found them breeding in great numbers, almost in colonies, at a camp between Yonte and Afmadu, in November." "Mr. Ernest Gedge found many nests wherever the grass was

short on the Turkwell River, in January and February." Two clutches of four and five eggs were found at Naviasha on July 29th, 1890, and two of four eggs each at Witu on June 8th. The latter vary and are dull white to cream in ground colour, freely speckled with minute purple-brown, freckled and spotted with purple-brown, spotted and blotched with reddish-brown, dark chestnut, or purple-brown. They measure  $27-30 \times 21.5-25$  mm.

Dr. van Someren, in the *Ibis* for April 1916, p. 221, writes: "Breeds in May, June, and July, and also in December, but the season depends on the rains to a great extent. . . . When the breeding season commences, the males are exceedingly pugnacious and fight with one another; they do some most surprisingly high jumps when trying to avoid one another. If one bird get a good grip of his opponent, he jumps about, shakes and worries his foe as a dog worries a rat. I have often watched these battles taking place. These Quails lay quite large eggs: the colour varies from a sandy to buff- or almost whitish-cream, with very fine to large raised black spots. They breed readily in captivity." I believe the above notes refer to birds in his aviary.

*Excalfactoria adansoni.*

ADANSON'S QUAIL.

*Excalfactoria adansoni* (Verr.).

Sharpe's Hand List., Vol. I. p. 32.

Reichenow's Vögel Afrikas, Vol. I. p. 509.

Sclater's Systema Avium Ethiop., Part I. p. 94.

*Description: Male.* Upper parts blackish-brown washed with slate, except the wing-coverts, scapulars, upper tail-coverts, sides, and flanks, which are bright chestnut, especially the outer wing-coverts, with a slaty-grey shaft-stripe down each feather; the middle of the back blotched with black; a white band edged with black; rest of the under parts very dark slate-grey; iris bright crimson; bill black, lower mandible horn-blue; feet yellow. Length, 149–152 mm.; wing, 73–76 mm. Weight,  $\frac{3}{4}$  oz.

*Female.* Upper part surface brown barred with black, most of the feathers with a pale buff or white shaft-stripe; forehead stripe over the eye and cheeks rufous-buff; chin and throat and fore-part of the neck white, shading into rufous-buff, rest of the under parts buff, paler towards the middle of the breast and belly; chest, sides, and flanks barred with blackish-brown; iris crimson to crimson-brown; bill black, base of both mandibles horn-blue; feet yellow to orange-yellow. Length, 145–153 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Eldoma Ravine, Nyando Valley, Bwega, Seroti Entebbe, Katonga River, Mohokya. Mpumu, Kyetema (van Someren). Maduma, Mubendi (Belcher). Nairobi (Percival).

*Notes.* Adanson's Quail, the most charming little game bird in East Central Africa, is both scarce and local, and is subject to partial migration. At the Eldoma Ravine it suddenly appeared in early October, and a few pairs bred there on the short grassy flats below the

station. There were also a few at Kitotos and Fort Ternan in May, and at Bwega's in N.W. Kavirondo in July. It also visited Entebbe in July, and an odd bird was seen in January and May. It was also fairly plentiful in the Katanga Valley in January, and a nest with six eggs was found near Mubendi on June 26th by Mr. Belcher. It frequents both short grass-country and native cultivations lying fallow. It lies very close and is a difficult bird to flush without beaters; they should walk in close order and brush the grass vigorously with switches.

Like all quails, it is always more reluctant to rise when the dew is on the grass in the early morning, or after a shower of rain. It feeds on a variety of small grass seeds and crawling insects, and becomes so fat that it is difficult to skin, and requires very careful handling and the free use of drying powder. The eggs are exactly like very small examples of our common partridge.

*Ptilopachus petrosus emini.*

LADO ROCK-FRANCOLIN.

*Ptilopachus fuscus* Vieill.

Sharpe's Hand List, Vol. I. p. 32.

Reichenow's Vögel Afrikas, Vol. I. p. 500.

*Ptilopachus petrosus ladoensis*, W. Sclater and Praed.

Sclater and Praed's Birds of the Anglo-Sudan, *Ibis*,  
1920, p. 843.

*Ptilopachus petrosus emini* O. Neumann.

Sclater's Systema Avium Ethiop., Part I. p. 94.



*Description.* Top of the head brown, fading into sienna on chest and mantle, each feather with a dark band down the shaft; those of the head are also margined with brownish-white, while those of the other parts have a submarginal band of whitish, and are irregularly barred with brown towards the margins; rest of the back, rump, and upper tail-coverts dull brown, finely vermiculated with whitish. Stripe over eye, cheeks, chin, throat, and neck dark brown, margined with whitish; middle of the breast uniform buff; sides of the breast, sides, and flanks chestnut irregularly and transversely barred towards the margins of the webs with dark brown and white; thighs dark brown, irregularly barred with white; belly and under tail-coverts dark brown, the latter fringed with dirty white. Tail dark brown, fairly mottled, especially on the inner feathers, with rufous-buff. Length, 279–298 mm.; wing, 132 mm.

*Female.* Similar to the male, but smaller.

*Distribution.* Uganda.

*Recorded Localities.* Nimuli (Delme Radcliffe). Uma River (Hodges). Fadiloek (O. Neumann).

*Notes.* The above-mentioned localities are now in Sudan territory, but this bird is included in the belief that it will be found in the hills in British territory on the west bank of the Nile. Dr. Hodges, P.M.O. of Uganda, a keen and careful observer of bird life, told me that when stationed in the Nile district he saw and obtained a small and very dark francolin on a rocky bush-covered hill near his camp on the north bank of the Uma River, and close to the local chief's village.

The thing that particularly struck him at the time was that when running about among the rocks, "one of them carried its tail like a bantam." This very marked peculiarity has quite recently been confirmed, and is recorded by Admiral Hubert Lynes, who writes in the *Ibis*, 1925, p. 587, as follows, in reference to a race of *P. petrosus* found in Darfur: "In life the bird is nothing like either a pheasant or a partridge, but, as most often seen, *i.e.* strutting about on the ground with its compressed or flat tail cocked up vertically, looks just like a Brown Bantam-fowl." In regard to breeding habits, Admiral Lynes also writes: "*Nest*: A scrape in loose soil with a dry grass lining near the base of a tree, or foot of a stone, well concealed in grass. *Eggs*: Three or four; pale, uniform stone colour; ovate, slightly pointed at small end; glossless. Av. 33·5 × 25·5 mm."

*Ptilopachus petrosus florentiæ.*

LADY DELAMERE'S ROCK-FRANCOLIN.

*Ptilopachys florentiæ* O. Grant.

Reichenow's Vögel Afrikas, Vol. I. p. 502.

*Ptilopachus fuscus florentiæ* O. Grant.

Claude Grant, *Ibis*, 1915, p. 22.

*Ptilopachus petrosus florentiæ* O. Grant.

Sclater's and Praed's Birds of the Anglo-Sudan,  
*Ibis*, July 1918 to October 1920, p. 843.

Sclater's Systema Avium Ethiop., Part I. p. 95.

*Description.* Similar to *P. p. emini*, but darker, the black markings, especially on the under parts of the

body, being much coarser. The mantle and upper back are devoid of the broad chestnut shaft-streaks characteristic of *P. p. emini*; on the sides of the breast, belly, and flanks the wide chestnut centres to the feathers are much reduced and the sides of the feathers are strongly barred with black and white; iris brown, bare skin round eye and base of chin dull carmine; base of bill also carmine, the tips dull dusky-yellow; feet dark coral-pink. Length, 279–298 mm.; wing, 119–129 mm.

*Female.* Similar to the male. Length, 298 mm.; wing, 127 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Hills near Ngobotok. Gessema (Delamere). Mt. Kenya (Mearns).<sup>1</sup> Mt. Moroto, Nakwai Hills (Cosens).

*Notes.* Lady Delamere's Rock-Francolin is confined to the stony, bush-covered foot-hills of the mountains and kopjes in the dry, arid northern districts of both the Colony and Uganda. It was first met with in the hills west of Ngabotok, and just above the cañon through which the Turkwell River runs. Two or three pairs were seen, but only one example, a cock bird, was obtained, and that after a stiff scramble amongst the boulders and thick bush, as it was running, jumping, and flitting from stone to stone. For a bird that could have been rarely, if ever, molested by man, it was remarkably wild, and appeared to rely entirely on its activity and running powers for safety. Lord Delamere

<sup>1</sup> Col. Mearns has separated birds obtained "on hills west of Mount Kenya" under the name *P. p. keniensis*.

subsequently obtained it at Gessema in the Samburu district north of the Uasok Narok; and again at long intervals Dr. Glover M. Allen obtained it on some hills west of Mt. Kenya. In the *Ibis*, 1915, p. 22, Mr. Willoughby Lowe writes as follows: "A small covey of this francolin was found in a dense thicket on a stony hillside on Mt. Moroto; they were shy and difficult to procure. In the Nakwai Hills they were more plentiful. They scale the steepest rocks with ease, and only take flight when forced."

*Numida mitrata mitrata.*

PALLAS'S HELMETED GUINEA-FOWL.

*Numida mitrata* Pallas.

Sharpe's Hand List, Vol. I. p. 42.

Reichenow's Vögel Afrikas, Vol. I. p. 438.

*Numida mitrata mitrata* Pall.

Sclater's Systema Avium Ethiop., Part I. p. 96.

*Description.* Very similar to *N. m. reichenowi*, but may be at once recognised by the shape of the helmet, which is much smaller and nearly conical. The feathers of the lower part of the neck and upper chest are finely barred with black and white; iris brown; bill horn-grey with reddish tinge, becoming deeper red at the base; all the horny part of the head except the helmet itself dark coral-red; helmet dark brown; wattles blue with semi-circular patch of white on the lower edge, tip bright coral-red; throat black, bare skin on side of face and neck bright blue with a patch of bright greenish-blue

on side of neck below the ear; feet brownish-black. Length, 584 mm.; wing, 266 mm.

*Distribution.* Kenya.

*Recorded Localities.* Malindi, Takaungu, near Mombasa, Maji Chumvi, Samburu, Taru.

*Notes.* Pallas's Guinea-fowl ranges along the coast between the Sabaki River and Vanga, and inland to Duruma and the eastern edge of the Taru wilderness. It is nowhere very numerous, and as a rule is found in small flocks of eight to a dozen. Small lots of four or five are not infrequently observed from the train in the vicinity of Maji Chumvi and in the shambas between Samburu and Taru Stations. Its scarcity is probably due to trapping and the destructive and sweeping bush-fires, the most deadly enemy to all game birds during the breeding season. Its habits it is similar to other Helmeted Guinea-fowls.

*Numida mitrata reichenowi.*

REICHENOW'S GUINEA-FOWL.

*Numida reichenowi* O. Grant.

Sharp's Hand List. Vol. I. p. 41.

Reichenow's Vögel Afrikas, Vol. I, p. 437.

*Numida mitrata reichenowi* O. Grant.

Sclater's Systema Avium Ethiop., Part. I p. 96.

*Description : Male.* Bony helmet, long, elevated and compressed, the base extending from the forehead to the occiput; the height varies. General colour of the plumage black, thickly spotted all over with white, the

spots on the upper parts being smaller than those of the under, and divided from one another by a network of dotted white lines; the black feathers up the middle of the back of the neck have decomposed webs; each of the white spots along the margin of the outer web of the secondaries takes the form of a short oblique band; iris brown; bill greenish-, sometimes brownish-horn, paler towards the tip, bare skin of the back of the head and neck, and of the throat, also round the eye, dull black; sides of neck bright blue, sometimes mottled with dark blue; rough fleshy core at base of bill, including base of wattle, dull coral-red; wattles blue with tip dull coral-red; rough part of base of the helmet dull mottled red and greenish-horn, top of it whitish-horn. Length, 603–617 mm.; wing, 298–300 mm. Weight, 3½–4½ lb.

*Female.* Similar but smaller. Length, 561–596 mm.; wing, 284–293 mm. Weight, 3–3½ lb.

*Distribution.* Kenya.

*Recorded Localities.* Ndara, Voi, Ndi, Doinyo Narok, Kibwezi, Makindu, Simba, Machakos, Kilungu, Kedong Valley, Naivasha, Morandat, Gilgil, Elmenteita. Tsavo (Praed). Embu, Nyeri, Kikuyu (van Someren). Loita, Amala River, Lengototo (Cosens). Kutu (Lönnberg).

*Notes.* Reichenow's Guinea-fowl ranges from the western edge of the Taru wilderness to Taveta, and north to Elmenteita, where it overlaps with the Tufted Guinea-fowl (*N. m. macroceras*). Its headquarters were, and probably are still, in the Teita district; it was also very plentiful near Taveta, and at Naivasha, but in the latter

locality it has been greatly reduced by indiscriminate and thoughtless shooting "for the pot" throughout the year. Around the western and southern base of Ndara large flocks used to congregate during the dry weather in December and January, and drank at a spring known to Swahili and Arab traders as *Marago ya kanga* (the Place of the Guinea-fowl), and at the pools in the otherwise dry watercourses that score the foothills between that spot and the camp at M'kuyuni. It was in one of these latter that Mr. F. Holmwood, H.M.'s Consul at Zanzibar, bagged twenty-two birds with a double shot "into the brown" of a flock that he surprised from above, as they were crowded together on the far side of a narrow drift after drinking. About the same spot, and under exactly similar conditions, Sir Robert Harvey killed three birds with a .450 copper-nosed bullet; one was blown to pieces, the other two were killed by splinters of lead. During the day these large flocks split up into small lots and flocks of sixty to a hundred, and scatter over their feeding grounds further afield. At dawn, before leaving the trees, and in the late evening when about to roost, it is very noisy; the latter is a favourite time for the pot-hunter to sally forth. *À propos* this, an anecdote may not be amiss. A young man, a new arrival, very keen but inexperienced, began stalking some birds in a tree, and while manœuvring in the bush came across one on the ground, and, in his excitement, pulled so vigorously that he broke off both triggers, and finally caught the bird in his hand; the gun was at half-cock, and the Guinea-fowl was caught by the leg in a trap!

Probably 75 per cent. of this fine game bird are ruthlessly killed anyhow, including "potting" on the ground, from trees when driven there by a dog, or when roosting. Walking up generally means running after them and peppering them from behind, resulting in many wounded and lost birds. If, however, circumstances permit, driving affords far and away the best sport. Three such drives are still pleasant memories, one over a belt of trees on the Ndara western foot-hills, and two over the Morandat River; in the latter the birds came over quite high enough, and there were no runners, as the impact on falling, far below my stand on the near side of the high sloping bank, knocked any remaining life out of them. This bird is an expert runner, and when doing so, like all members of the genus, it raises its wing upwards while still compressed against its sides until the secondaries arch over and well above the line of the back, giving it a curious humped-up appearance. During the breeding season the flocks break up, and the pairs disperse; it is then quite silent, and so rarely seen that an impression is conveyed that a whole district has been deserted.

In Teita it breeds in January, February, and March, and broods of cheepers were met with in April; at Nainvasha it breeds in June and July. The nest is generally hidden in thick scrub, and the eggs vary in number up to twelve or fourteen. I have one clutch of twelve from the Morandat on July 18th, and a nest of fourteen was found deserted with the eggs much stained and rotten also in July. The eggs are buff, either plain, or freely pitted and speckled with purplish-brown, and measure



50–53 × 37–41 mm. A clutch of twelve eggs ranged from cream to buff, and from quite plain to being minutely speckled with purple-brown or freckled with pale brown, or dark buff and speckled with white.

*Numida meleagris major.*

HARTLAUB'S TUFTED GUINEA-FOWL.

*Numida major* Hartlaub.

Sharpe's Hand List, Vol. I. p. 41.

*Numida ptilorhyncha major* Hartlaub.

Reichenow's Vögel Afrikas, Vol. I. p. 445.

*Numida meleagris major* Hartl.

Sclater's Systema Avium Ethiop., Part I, p. 97.

*Description: Male.* Similar to the Helmeted Guinea-fowls (*N. m. reichenowi* and *N. m. mitrata*), but differs in having a bunch of horny bristles at the base of the culmen. The upper half of the neck is thinly covered with black feathers, and the margins of the outer webs of the secondaries are finely vermiculated with black and white; the white spots of the greater secondary-coverts are more or less confluent and form oblique white bands; iris brown; bill dull carmine, fading to dull yellow at tip, or rosy-red fading to yellowish-green at tip; reddish-brown, tip and lower mandible bluish-white (Ankole, February); wattles, cheek, and collar pale blue, rest of bare skin leaden-black. Length, 555–632 mm.; wing, 262–282 mm. Weight, 2 lb. 14 oz. to 3 lb. 12 oz.

*Female.* Length, 530–610 mm.; wing, 267–270 mm. Weight, 2 lb. 8 oz. to 3 lb. 2 oz.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Turkwell River, Nandi, Kavirondo, Mabira, Sanga, Mbarara, Ruibale, Lwengwe, Kitchwamba, Hima, Katwe, M'panga, Nakasongola, Bugoma, Butiaba, Wera, Teso, Uma River, Kosibiri River, Mt. Moroto, Bokoro, Kitgum, 40 miles south of Gondokoro, Chua (Cosens). Mpumu (Seth-Smith). Kikarongo, Kyetema (van Someren). Mohokya (Woosnam).

*Notes.* Hartlaub's Tufted Guinea-fowl is one of three races found in East Central Africa. Mr. Claude Grant has very carefully examined all the Helmeted and Tufted Guinea-fowls in the Natural History and Tring Museums, from Abyssinia, Somaliland, East Africa, and Uganda, and has given the result of his laborious investigations in the *Ibis* for January, 1915, pp. 26 and 27. He recognises three races of the type species from Abyssinia (*N. meleagris*), only one of which is found in Uganda, and I readily accept his conclusions. This race ranges westwards from Mau and Elgeyu escarpments, and throughout the Uganda Protectorate. It is well able to adapt itself to its varied surroundings, from the dry, arid bush-veldt of the upper Turkwel River, to the hot, humid climate and rank tropical vegetation and elephant-grass areas of Uganda, Busoga, and Bunyoro. It also varies a good deal in size and weight, those from Entebbe, Buddu, Ankole, and Toro being the largest and heaviest, while those from Buruli, Lake Albert, and the Nile districts are the smallest. It is, as a rule, met with in flocks varying in number from half a dozen up to forty or sixty, the numbers being to a large extent regulated by

the nature of the locality, the flocks being larger in the more open country. The upper Turkwel River is, perhaps, the stronghold of this bird; it certainly was so in December 1889 and January 1890. Flocks of a hundred or more birds were not uncommon, but the greatest number ever seen together was on January 2nd and 3rd; it was then massed together in an immense flock of not less than two thousand birds. On the 2nd they were left undisturbed, as I was stalking a buffalo close by; on the 3rd they were found about a mile from the river, busily turning up the crust of the dry, sun-baked soil in a cloud of dust, and as I was out "for the pot," with some thirty men, a drive was decided on. The men were directed to make a wide detour and get beyond them, then spread out, and quietly drive them towards the river, fringed by a belt of sycamore-fig and other large trees, whilst I took up a position with a gun-bearer on the far side. It was a truly wonderful sight to see that dense mass of birds slowly approaching to within a few hundred yards before they began to rise, first only a few together, then in flocks of twenty or so, then on with a final rush; a real hot corner. Nineteen birds were picked up, and five or six runners were lost. Actually, there was ample room for six guns, and there is no knowing what the bag might have been.

Shooting Guinea-fowls when they are going straight away, unless they are within twenty-five yards, or No. 2 shot is used, is unsatisfactory; so many birds escape wounded, and are lost. At a crossing bird, by shooting well forward, a pellet or two of No. 8 in the head or neck

will crumple it up as effectively as No. 5 or larger shot. But the best sport of all is afforded with a .22 rifle when the birds are settled in trees after being disturbed by a dog, when wet after a rain-storm, or when going to roost; it entails very careful stalking. All the Helmeted Guinea-fowls are similar in their habits, and their daily routine may be roughly summarised as follows. At dawn, they commence their loud cackling call, and as soon as it is light enough leave the trees and begin feeding, working their way towards water, and drink between eight and nine o'clock; they lie up in the shade of trees and bushes during the heat of the day, and about 4 p.m. begin feeding their way back to water, drink, and again leisurely feed their way towards roosting quarters, and at dusk fly up into the trees to the accompaniment of further cackling. In dry, sun-baked localities, where there is little or no grass, it is not uncommon to find areas, often many acres in extent, where the crust of the earth has been turned up as if by a rake. This is the work of Guinea-fowls, and it is done by the bill, and not by scratching with the feet, as is generally supposed. During the breeding season, it appears to vanish from a locality in which it was previously common, the explanation being that it is then widely scattered in pairs, and in thick covert; the females being occupied with laying, brooding, or attending to the chicks, while the males are "lying low" in the near vicinity, and are quite silent. In Uganda it breeds from January to March and again in July and August. Mr. L. M. Seth-Smith states: "A nest was found at the end of June with

seven eggs just hatching. These were put under a hen and five hatched out. Spotted feathers on the breast began to appear when they were six weeks old." The eggs vary a great deal in both size and markings. The clutch of four eggs from Nandi are buff, washed or marbled with pale purplish-lilac, and measure 55-58 × 40-41 mm. Another from Busoga are dark cream or buff, freely, and very conspicuously speckled and spotted with purple-brown, and measure 47-48 × 38 mm.

*Numida meleagris macroceras.*

BARINGO TUFTED GUINEA-FOWL.

*Numida major* Hartlaub.

Sharpe's Hand List, Vol. I. p. 42.

*Numida ptilorhyncha major* Hartl.

Reichenow's Vögel Afrikas, Vol. I. p. 445.

*Numida ptilorhyncha rendilis* Lönnberg.

Lönnberg, Swedish Expedition, 1911, *Birds*, pp. 47-51.

Claude Grant, *Ibis*, 1915, p. 25.

*Numida ptilorhyncha macroceras*, Erlanger.

Orn. Monatsb. XII. 1904, p. 97.

Sclater's Systema Avium Ethiop., Part I. p. 98.

*Description.* Equal in size and colour to the other races, but having a *distinctly larger helmet*. Length, 578-608 mm.; wing, 267-277 mm. (Lowe). Weight, male, 3 lb. to 3 lb. 6 oz.; female, 3 lb.

*Distribution.* Kenya.

*Recorded Localities.* Gilgil, Elmenteita, Nakuru, Molo Kiver, Baringo, Kamassia, Laikipia, Malawa River,

Ipolossat, Rumuruti. Pesi Swamp (Harrison). N. Uaso Nyiro, Luazomela River, and Meru (Lönnberg).

*Notes.* The Baringo Tufted Guinea-fowl ranges over a vast area lying between Lorian on the east and the west side of the Rift Valley. Roundabout Gilgil, where it foregathers with *N. m. reichenowi*, and also at Baringo it used to be extremely abundant, possibly it is so still in the latter locality; but it has been greatly reduced in the settled areas. In habits it is similar in all respects to *N. m. major*. The development of the helmet appears to reach the maximum in the N. Uaso and Rendill districts. It breeds between April and June. A burned-out nest with ten scorched eggs was found in a clump of tangled scrub at Elmenteita in July and another with four eggs at Baringo in April. The eggs are indistinguishable from those of *N. m. major*.

*Numida meleagris somaliensis.*

SOMALI TUFTED GUINEA-FOWL.

*Numida somaliensis* O. Neumann.

Neumann, Orn. Monatsb. 1899, p. 25.

Claude Grant, *Ibis*, 1915, p. 27.

*Numida meleagris somaliensis* O. Neumann.

Sclater's Systema Avium Ethiop., Part I. p. 98.

*Description.* Similar to other races in size and colour, but having a *red tip* to the face-wattles and with tuft of bristles longer and paler. Wing, male, 274–286 mm.; female, 263–285 mm.

*Distribution.* Kenya.

*Recorded Localities.* Wajheir. Loiala (Clarke).

*Notes.* The Somali Guinea-fowl ranges south to Wajheir, where my collector, Bafirawara, obtained three examples; and towards the Lorian Swamp, where Colonel Stevenson-Clarke obtained it. Somewhere thereabouts it approaches the eastern limit of the range of the Baringo race (*macroceras*). I do not suppose that there are any very marked differences in the habits of this bird due to the fact that it rejoices in having a red tip to its wattles!

Unless there is another race that ranges over the country between Wajheir and Kismayu, or *N. m. mitrata* is found to extend north to the latter place, it is probably this bird that Mr. Francklin refers to in the following interesting note in the *Journal* of the East Africa and Uganda Natural History Society, 1919, No. 15, p. 497: “. . . when the police were firing on the range in the afternoon, some miles away from the beach, a covey of Guinea-fowl, about eighty strong, became frightened and flew towards the beach, where they settled. On being pursued they flew out to sea about a mile and then dropped into the sea, most of them being drowned. The boat-boys went out and got quite a good bag.”

*Guttera edouardi seth-smithi.*

SETH-SMITH'S CRESTED GUINEA-FOWL.

*Guttera cristata* Wagler.

Sharpe's Hand List, Vol. I, p. 42.

Reichenow's Vögel Afrikas, Vol. I. p. 450.

*Guttera edouardi seth-smithi.*

Slater's *Systema Avium Ethiop.*, Part I. p. 99.

*Description.* General colour black, spotted all over with round dots of blue, most of the feathers being narrowly edged with the same colour. The top of the head is covered with a full long crest of curling black feathers; a uniform black collar round the base of the back extending in front on to the upper part of the chest; iris brown; bill greenish-horn colour; skin of throat Indian-red, upper part of bare head dark slate, fold on back of neck pale slaty-grey; feet dusky-brown with slaty-grey tint. Wing, 259 mm. Weight of male, 2 lb. 8 oz. to 2 lb. 14 oz.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Eldoma Ravine, Mabira, Bundongo, Bugoma. Bunyoro (Seth-Smith). Durro (van Someren).

*Notes.* Seth-Smith's Crested Guinea-fowl is distinctly local, and is confined to thick primeval forests. So far as I am aware, in the Colony it is confined to Mau forests, and it is, or was, fairly plentiful in the vicinity of the Eldoma Ravine. It was many times heard, though not often seen, when hunting for the elusive Bongo. It was, in fact, obtained on one occasion only, in March, while driving some small clumps of forest close to the Ravine Station for Bushbuck and Duikers that nightly raided the kitchen garden. Out of a flock of sixteen, seven were bagged, all of which proved on dissection to be males, even though they varied in weight as much as six ounces between the largest and smallest. The



females were probably in the main forest close by, either sitting on eggs, or in attendance on their broods. Whenever actually seen, it was invariably in flocks of three or four up to twenty. Its food consists of seeds, berries, and crawling insects, snails, etc., which it obtains by grubbing and scratching about amongst the fallen leaves. It has three distinct calls, one a harsh, grating note of alarm; another a short, double note that sounds like the word *yusuf*, as it moves along quietly through the forest; and the third, a very striking one, a soft, musical trill repeated many times, whilst the bird stands bolt upright, and with neck stretched to its full extent. Dr. van Someren writes in the *Ibis*, 1916, p. 414: "Young birds in first plumage were obtained in March, and eggs in January. The eggs are large and pure white with a pitted matt surface. We obtained an egg from the oviduct of the January bird; it was fully formed and ready for depositing."

*Guttera pucherani*.

PUCHERAN'S CRESTED GUINEA-FOWL.

*Guttera pucherani* Hartlaub.

Sharpe's Hand List, Vol. I. p. 42.

Reichenow's Vögel Afrikas, Vol. I. p. 452.

Sclater's Systema Avium Ethiop., Part I. p. 99.

*Description.* Differs from *G. e. seth-smithi* in having the spotting continued right up to the naked neck; iris crimson; naked skin round the eye and the head, the chin and throat crimson-red; the back and sides

of the neck blue. Length (dry skins), 450–500 mm. ; wing, 274 mm.

*Distribution.* Kenya.

*Recorded Localities.* Witu, Merereni, Taru Hill, Taveta, M'songoleni, Kibwezi, Ngong, Kikuyu. Mt. Kenya (Lönnerberg).

*Notes.* Pucheran's Crested Guinea-fowl ranges from the coast to Taveta, and northward to Kikuyu.<sup>1</sup> It is confined to forest, or tall and very thick bush bordering forests, and is, in consequence, a local bird. On Taru Hill and at Merereni, it was practically unapproachable in the dense bush, but in the more open forests it is not so difficult to obtain. Curiosity and a desire to make out what the intruder can be, coupled, no doubt, with confidence in its own running and dodging powers, often induced it to stand and investigate; and several times would have enabled me to bag one or more with an easy pot-shot, had not Harvey's Duiker been a more coveted trophy at the moment. Its near presence in the dim light and silence of the forest is generally made known by a distinct but low warning call, or the rustling patter

<sup>1</sup> In the forests along the Ngong road, a blue-spotted Crested Guinea-fowl was seen several times, but not obtained, and I was uncertain whether it was *pucherani* or *seth-smithi*, but favoured the former as the more probable. This view was strengthened when Professor Lönnerberg, in his report on the birds collected by the Swedish Expedition (1910–11), p. 52, states that Dr. Dearborn, of the Field Museum, Chicago, had recently recorded it from Kenia. Dr. van Someren, however, in *Novitates Zoologicae*, xxix. 1922, p. 26, has placed it under *G. c. suahelica* Neum. with the remark: "A doubtful form"—presumably of *G. cristata*—the type of which came from Lindi in Southern Tanganyika territory.

of its feet amongst the dead leaves. In all respects it is very similar in habits to *G. e. seth-smithi*. In bygone days, when our transport and supplies depended entirely on Swahili porters, the late Mr. Frank Hall, when in charge of Fort Smith, had a tame example of this species that had the free run of the station. This bird, he assured me, invariably foretold the approach of a caravan by a certain loud and sustained call; and so convinced were his station staff of its infallibility that whenever the call commenced the joyous shout went up "Safari leo" (A caravan to-day).

It breeds at Msongoleni in April and December.

Two nests containing three and four eggs respectively were found well hidden under small bushes in scrub just within the forest belt, and close to the stream.

The eggs are cream colour, minutely pitted and flecked with very pale brown, or pale brownish-lilac, and measure 49-50 × 40-41 mm.

*Acryllium vulturinum.*

VULTURINE GUINEA-FOWL.

*Acryllium vulturinum* (Hardwicke).

Sharpe's Hand List, Vol. I. p. 42.

Reichenow's Vögel Afrikas, Vol. I. p. 448.

Sclater's Systema Avium Ethiop., Part I. p. 99.

*Description.* Head and neck naked, with a horseshoe-shaped band of velvety reddish-brown feathers round the back of the nape; lower neck, mantle, and chest with long pointed hackles, black with wide white shaft-stripes, and margined with pale cobalt-blue; the longer

hackles are also more or less minutely dotted with white and covered with small, rounded, black-edged spots; breast and abdomen cobalt-blue, black down the centre; iris crimson; bill greenish-horn; naked skin of head leaden-grey, neck darker; feet brownish-black. Length, 680–750 mm.; wing, 309–326 mm.

*Female.* Similar but smaller. Length, 731 mm.

*Distribution.* Kenya; the bush-veldt between Taru and the Abyssinian frontier.

*Recorded Localities.* Butzuma, Mackinnon Road, Maungu, Voi, Tsavo, and Sabaki Rivers, Kinani, N. Uaso Nyiro, Wajheir. Njoro (Lönnberg). Useri River, Tana River, and Duruma (Hunter). M'songoleni (van Someren).

*Notes.* There can be no mistake in identifying this beautiful bird; in its long pin-tail, and the hackles on the lower neck and chest, it differs from all other Guinea-fowls. It is essentially a bird of the dry, arid, scorching, and most uninviting bush-veldt, which it shares with the Dik-Diks. It can frequently be seen from the train between Mackinnon Road and the Tsavo, in small lots of two or three up to a dozen. Further north on the N. Uaso Nyiro and beyond, it assembles in large flocks. It is a champion runner, is very difficult to flush in its bush-stronghold, and will carry away a lot of shot. In many parts of its habitat it must, for several months in the year, depend entirely on drops of dew for its water supply.

In the neighbourhood of the Tsavo it breeds between February and April. The eggs are broad oval, pale cream, with a fair amount of gloss, with pores very slightly darker. They measure  $51 \times 38$  mm.

## TURNICIDÆ.

### *Turnix nana.*

SOUTH AFRICAN HEMIPODE, OR BUTTON-QUAIL. .

*Turnix nana* Sund.

Sharpe's Hand List, Vol. I. p. 48.

Reichenow's Vögel Afrikas, Vol. I. p. 301.

Sclater's Systema Avium Ethiop., Part I. p. 76.

*Description.* Above, variegated black, brown, and white; the colours so disposed on each feather as to make the bird appear scaly; sides of the head, chin, throat, and breast, clear rufous, the sides of the latter variegated with a few black and white bars; abdomen and flanks white; iris silvery-white; bill dusky-white or brownish-white; feet dusky-white, or flesh colour. Length, 137–143 mm.; wing, 69–73 mm.

*Female.* Length, 159–169 mm.; wing, 78–81 mm. Weight, 2¼ oz.

*Distribution.* Uganda.

*Recorded Localities.* Entebbe, Katonga Valley, Rusassa, Kisassa, Gaisimairi. Mohokya (Woosnam). Mpumu (Seth-Smith). Keyetema (van Someren).

*Notes.* Sundevall's Hemipode, or Button-Quail, is scarce and local, but a resident bird, and is apparently confined to the short grass and grazing areas to the south of the Jinja-Kampala-Mubendi-Fort Portal Road. It

is in all respects similar in habits to its more widely distributed relative (*T. s. lepurana*). Mr. F. C. Belcher tells me that the call of this Button-Quail is a low deep *coo*, and that he frequently heard it; on one or two occasions in September and October, when we were out together, he called attention to it, but my hearing was too impaired to detect it. Mr. L. M. Seth-Smith, in the *Ibis*, 1913, p. 507, writes: "One hears frequently a curious booming call, which all the natives say is a puff-adder, but which, I think, may be this bird." A female in full breeding condition was shot at Entebbe on October 12th, and a nest with three eggs, from which the bird rose less than four feet away, was found on October 18th, in short grass near the Isolation Hospital at Entebbe; it was a small, scraped-out depression at the base of a small tuft of grass, and was lined with a few grass stems. The eggs are abruptly pointed, and densely covered with small dark brown spots.

*Turnix sylvatica lepurana.*

SMITH'S HEMIPODE.

*Turnix lepurana* Smith.

Sharpe's Hand List, Vol. I. p. 48.

Reichenow's Vögel Afrikas, Vol. I. p. 301.

*Turnix sylvatica lepurana* Smith.

Sclater's and Praed's Birds of the Anglo-Egyptian Sudan, *Ibis*, 1920, p. 840.

Sclater's Systema Avium Ethiop., Part I. p. 76.

*Description.* Above, ground colour, intermediate between pale rufous and light chestnut; upper surface

of head barred with brown; on the neck, back, and shoulders numerous slender blackish-brown bars, or irregular crescents; eyebrows, sides of head, and stripe between base of bill and nape of neck rusty-white; chin and throat dull white; middle of breast pale rusty-red with a few minute brown dots; sides of breast and abdomen white with a yellowish tinge; each feather with an arrow-shaped brown spot near the point; iris straw-yellow, or yellowish-white; bill dull horn-blue; feet white. Length, 137-143 mm.; wing, 74-78 mm.

*Female.* Length, 163-168 mm.; wing, 81-85 mm. Weight,  $1\frac{1}{2}$ - $2\frac{1}{2}$  oz.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Lamu, Manda, Kiamboni, Mombasa, Ndara, Ndi, Mtito Andai, Kamassia, Baringo, Turkwel River, Butiaba, Nimuli. Suswa (Cosens). Doiyo Sabuk (G. H. Gurney). Fort Hall (Lönnerberg). Simba, Samburu, Kisumu (van Someren).

*Notes.* This is the common "Button-Quail" of both the Colony and Uganda. It has a wide range, is a resident, and, I believe, remains in a locality all the year round, or is only subject to local movements on a very small scale. It is found on dry sandy soil, in short grass, low scrub, and in open bush, and is very partial to native cultivations, particularly those that are lying fallow. It is a difficult bird to flush, and as a rule gets up within a few feet, and rarely goes beyond shot-gun range before dropping down again. Only very occasionally can it be made to rise again, as it much prefers to seek safety by running or creeping about in the grass and scrub.

On several occasions I have attempted to catch one by hand, and certainly could have done so with a butterfly net. It feeds on grass seeds, caterpillars, and crawling insects. It is almost invariably very fat, and the skin being exceedingly tender, it is often badly torn, even by No. 10 shot, and requires very careful handling when skinning. One day on Manda Island I witnessed a Sparrow-hawk seize one of these little Quails with a quickness little less than astonishing, and later jotted down the following note: "A Button-Quail rose almost at my feet, and I was just going to shoot at it with a walking-stick gun, when it was seized from *below* by a Sparrow-hawk (*A. m. tropicalis*) that was sitting on a small stone hidden in the scrub, and about fifteen yards away. The hawk jumped up, and dropped again exactly like, and as quickly as a Nightjar does at a passing insect. Exchanged small gun for 12 bore, and as the hawk rose, with the Quail in its talons, got both. Quail so much torn that quite useless for either skinning, or the pot." On December 18th, on the mainland at Taka, opposite Patta Island, a nest containing four eggs was found in short grass on the edge of a native shamba; another was found on April 7th, and two others on Mombasa Island, in October. Mr. G. H. Gurney found a nest with four recently-hatched chicks on January 30th somewhere in the vicinity of Doinyo Sabuk. In pre-railway days one of the men of a small police outpost on the Tsavo placed four eggs under a native fowl, and I saw the four young birds when two to three days old. They were the most comical, but delightful little mites ever



seen, no bigger than bumble bees, but very active, and the little foster-mother could scarcely have been prouder if she had been strutting about with baby Dorkings.

The nest is a simple scratching in the ground under the shelter of a tuft of grass or weeds, with a few grass stems as a lining. The eggs are pyriform, greyish-white with a pinkish tinge, densely spotted, and sprinkled with pale purple, yellowish-brown, and reddish-brown, more thickly at the larger end. Some of the markings have a tendency to become confluent. They measure 22-23 × 17-18 mm.

*Ortyxelos meiffrenii.*

QUAIL-PLOVER, OR PIGMY COURSER.

*Ortyxelos meiffrenii* Vieill.

Sharpe's Hand List, Vol. I. p. 169.

Reichenow's Vögel Afrikas, Vol. I. p. 162.

*Ortyxelos meiffrenii* Vieill.

Sclater's Systema Avium Ethiop., Part I. p. 77.

*Description. Adult Male.* General colour above variegated like a Hemipode (Button-Quail), vinous-red, vermiculated with black and streaked with white, or sandy-buff, the feathers being edged with the latter colours, this light edging being accompanied by an internal line of black; wing-coverts white, the inner ones like the back, but with larger markings of white; primary-coverts and quills blackish, the outer primaries with a sandy-buff spot at the ends, vermiculated with black, and having a white or sandy-buff band across

the basal portion of the feathers; inner primaries and secondaries black with broad white tip; lower back, rump, and upper tail-coverts more uniform vinous-red, with a few dusky cross-bars and concealed white spots; tail-feathers sandy-buff, the centre ones distinctly barred with dusky-brown, the remainder vermiculated; head a little browner than the back, the centre of the crown streaked with creamy-buff, forming a broad longitudinal streak; a broad eyebrow, and the sides of the face creamy-white, with a brown streak behind the ear-coverts; throat and under-surface of body white, washed with creamy-buff on the throat and chest; the fore neck and sides of upper breast sandy-rufous, vermiculated with dusky-blackish, and spotted with white; under wing-coverts white; iris light brown or hazel; feet white. Length (dry skin), 122 mm.; wing, 76 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Turkwel River, Koromoja, Baringo.

*Notes.* This tiny Quail-Plover is confined to the dry, arid localities in the northern districts of both the Colony and Uganda, and is a rare bird. An odd one, here and there, was met with in the dry open-bush, and low scrub on the Turkwel River, in December; and one, a male in breeding condition, was obtained on the 30th. In similar country, on the west side of Lake Baringo, two were seen in September, but on each occasion bigger game was being stalked at the moment.

In its habits of squatting and lying very close, in appearance when flying, and only going a short distance

before settling again, it is very like the Button-Quail (*T. s. lepurana*); but whereas the latter invariably drops into covert, this little bird drops, Courser-like, on to bare, open, sandy ground, runs a short distance, stands still for a few moments watching the intruder, and then crouches. It is then very difficult to see, and undoubtedly relies on its protective colouring for escaping detection. My specimen rose twice, but dropped again so near that I could not shoot, but the third time my gun-bearer made it do so at a fair range, by throwing a stick at it. This was done, not, I fear, with a view to giving it a sporting chance, but to prevent damage by sand and grit being thrown up by the shot striking the ground all round it, rather than by the shot itself, as so frequently happens when a small bird is "potted" on bare ground.

Admiral Hubert Lynes found this little bird breeding in Darfur, in the Sudan, in January. The tiny nest is a mere scratching in the bare ground, but quite noticeable at a fair distance by a rim of small pebbles and oddments. The eggs, two in number, are cream coloured, freely speckled, and spotted with grey, brown, and black, some of the latter being confluent. They measure about  $17.5 \times 14.7$  mm.

## PTEROCLIDÆ.

### *Pterocles senegalensis somalicus.*

#### SOMALILAND SAND-GROUSE.

*Pterochurus exustus* Temm.

Sharpe's Hand List, Vol. I. p. 50.

Reichenow's Vögel Afrikas.

*Pterochurus senegalensis somalicus* Hartert.

Sclater's and Praed's Birds of the Anglo-Egyptian Sudan, *Ibis*, 1920, pp. 837-838.

*Pterocles senegalensis somalicus* (Hartert).

Sclater's Systema Avium Ethiop., Part I. p. 156.

*Description: Male.* Lores, cheeks, throat, and nape dull ochre, shading into vinaceous-buff on the chest; top of the head, upper back, rump, and upper tail-coverts pale isabelline-brown. A narrow black band edged with white separates the chest from the rich fulvous upper breast, which shades into deep chestnut-brown on the lower breast, flanks, and abdomen. Tarsi and under tail-coverts whitish-buff; centre pair of tail-feathers produced into long black filaments, rest of the tail-feathers dark brown, tipped with buff; iris brown; bill bluish-white; toes dusky-grey. Length, 300-316 mm.; wing, 171-184 mm.

*Female.* Differs from the male in having a broad, blackish-brown bar down the middle of each feather of the top of the head, neck, upper back, and chest; on the two latter the extremity of this bar is swollen, giving

these parts a spotted appearance. The back, rump, and upper tail-coverts are pale vinaceous or fulvous, thinly barred with black; abdomen and flanks blackish-brown, closely barred with rufous-buff. Tail-feathers like those of the back, the middle pair being produced in moderately long black filaments, while the remainder are tipped with yellowish-white. Wing, 165-175 mm.

*Distribution.* Kenya.

*Recorded Localities.* N. Uaso Nyiro, Archer's Post. N.W. of Baringo (Cosens). Jubaland (Col. E. G. Harrison), Meuressi, Turkwel, Turkana (van Someren).

*Notes.* This Somaliland Pin-tailed Sand-Grouse ranges southward from the Abyssinian and Italian frontiers to the N. Uaso Nyiro, and westward to the Kerio River, or thereabouts. My collector obtained it near Archer's Post, in July; and Captain Cosens met with "several large flocks at a spot thirty miles N.W. of Baringo." It is, no doubt, similar in its habits to its very near relative found further south.

*Pterocles senegalensis olivascens.*

KENYA PIN-TAILED SAND-GROUSE.

*Pterochlorus exustus* Temm.

Sharpe's Hand List, Vol. I. p. 50.

Reichenow's Vögel Afrikas, Vol. I.

*Pterochlorus senegalensis olivascens* Hartert.

Slater's and Praed's Birds of the Anglo-Egyptian Sudan, *Ibis*, 1920, p. 839.

Hartert, Orn. Monatsb. 1909, p. 183.

Slater's Systema Avium Ethiop., Part I. p. 156.

*Description.* Similar to *P. s. somalicus*, but slightly smaller, with richer coloured and darker back, and a much more rufous tint on the breast. *Male*: iris brown, eyelids yellow; bill dull yellow, lower mandible light yellow; feet greenish-yellow. *Female* as above, but bill dark brown, with base of lower mandible yellow.

*Distribution.* Kenya; southern part of the Rift Valley.

*Recorded Localities.* Useri River. Campi ya Simba (Hartert). S. Uaso Nyiro (Cranworth). Simba River (van Someren).

*Notes.* The Kenya Pin-tailed Sand-Grouse may justly be regarded as a distinctly local race; it appears to be completely isolated, and confined to dry, sandy, and stony spots, dotted with small acacias, on the plains between the Useri River and the S. Uaso Nyiro. It is a resident. Mr. H. C. V. Hunter and I met with it in considerable numbers, and the attached note was made at the time: "Only seen at one place, near a camp on the Useri River in June. Here the plains are very sandy and stony. Although there is plenty of water about, these birds appeared to have one favourite drinking-place, where about 9 a.m., they, together with the other two species (*E. d. decoratus* and *E. g. saturatior*), came in hundreds. This bird was not in such large flocks as the other one, and was generally in lots of six to twenty individuals. Further afield, it was scattered about on the plain, mostly in pairs, or small lots of five or six. It is very difficult to detect on the ground unless it moves. Its call is generally heard when going to and from water, and

while circling round just before dropping down to drink." But our experience of this bird was the merest bagatelle compared with Lord Cranworth's on the S. Uaso Nyiro which he describes most graphically in his book, "Profit and Sport in British East Africa," pages 409-413. He and a friend found them massed together on the ground, in tens of thousands, waiting their turn to drink. It was found breeding in June and July, two eggs being laid on the bare ground. They are stone-grey, greyish-white, or cream, with spots, specks, streaks, and blotches of pale olive-brown and greyish-brown, with underlying spots and blotches of mauve-grey. They measure  $37 \times 25$  mm.

*Eremialector decoratus decoratus.*

DECORATED SAND-GROUSE.

*Pterocles decoratus* Cabanis.

Sharpe's Hand List, Vol. I. p. 50.

Reichenow's Vögel Afrikas, Vol. I. p. 310.

Claude Grant, *Ibis*, 1915, p. 32.

*Eremialector decoratus decoratus* Cab.

Sclater's Systema Avium Ethiop., Part I. p. 157.

*Description*: A broad black band edged on either side with white surrounds the gape; a white and black stripe above the eye; top of the head and nape buff, with black shaft-stripes; sides of the face pale vinaceous-buff, shading into darker on the sides of the neck and chest; feathers on the back of the neck, back, rump, and upper tail-coverts dull buff barred with black;

upper breast white, separated from the chest by a narrow black band; lower breast and abdomen black, most of the feathers margined with white; lower part of leg and tarsus whitish-buff; under tail-coverts bright buff with a subterminal black triangular mark. Tail like the upper tail-coverts, but the outer feathers are tipped with whitish-buff; iris brown; bill dull yellow, lower mandible light yellow; feet greenish-yellow. Length, 266 mm.; wing, 162-166 mm.

*Female.* Differs from the male in having no black and white band on the head, the black bars and markings on the back and wing-coverts following the shape of the feathers, and the neck and breast barred with black; iris brown; bill horn-brown, base of lower mandible dull yellow; eyelids pale greenish-yellow; feet pale yellowish-green. Wing, 154 mm.

*Distribution.* Kenya; the Taveta-Tsavo-Kibwezi-Simba bush-veldt.

*Recorded Localities.* Lake Jipi, Lanjoro, Kampi ya Simba, Rombo, Useri River, Tsavo, Kinani, Mtito Ndei, Doinyo Narok. S. Uaso Nyiro (Cosens). Taveta, M'buyuni (van Someren).

*Notes.* The Decorated Sand-Grouse, the smallest of the family found in the Colony, ranges over a much larger area than *P. s. olivascens*, but is almost as completely separated from the northern race (*E. d. ellenbecki*) as *olivascens* is from *P. s. somalicus*. This may be accounted for by the fact that it is much more a bird of the bush-veldt than any of the other Sand-Grouse. Captain Cosens obtained it as far west as the S. Uaso



Nyiro, and writes (*Ibis*, 1915, p. 32): "Stomach contained seeds of a leguminous plant. A few of these birds were seen coming to drink at about 10 a.m. No others were observed." It is very plentiful in the Taveta district, and may be met with singly and in pairs, scattered about sometimes in little open spaces in quite thick bush; and it only appears to assemble in flocks between 9 and 10 a.m., when *en route* to drink at some favoured pool during the rains, or at other times at a particular drift in a river or stream.

This partiality for a particular drinking place is very marked in all the Sand-Grouse, and apparently it is selected quite regardless of distance from the bird's feeding grounds. For instance, it came in large numbers, in flocks of four or five to a dozen, to Langora spring within a few miles of Lake Jipi; to a small muddy but shallow pool about a mile from the clear, running water of the Lumi River; to one particular drift on the Useri River, where there were other drifts close by both above and below; and, as early as 7 a.m., to an overflow from a tank in Tsavo Railway Station, within thirty yards of the line, and only a few hundred yards from the river. The one essential, apparently, is plenty of space, and a very gentle slope or almost flat approach to water only an inch or two deep. When moving towards its drinking places from its feeding grounds, it flies high up, and utters at short intervals a few high-pitched and drawn-out call-notes, possibly to attract and gather together those of its kind. On arrival it circles round a few times to see if all is well and the coast is clear,

before swooping down. On the Useri plains, it breeds in June and July, generally on sandy and stony spots, and lays two eggs on the bare ground. On the Seregeti plain, Mr. Mackworth-Praed "came across three nests in early August, each with two eggs." The eggs are very glossy, with buff ground colour, spotted with reddish-brown, and with underlying markings of mauve-grey. They measure  $40 \times 25$  mm.

*Eremialector decoratus ellenbecki.*

ELLENBECK'S DECORATED SAND-GROUSE.

*Pterocles decoratus ellenbecki* Erlanger.

Reichenow's Vögel Afrikas, Vol. I. p. 310, and Vol. III. p. 803.

Lönnerberg, Kun. Sven. Vet. Ak. Handl., 1911, p. 41.

*Eremialector decoratus ellenbecki* Erl.

Sclater's Systema Avium Ethiop., Part I. p. 157.

*Description* : Similar to the typical race, but paler.

*Distribution*. Kenya; N. Uaso Nyiro to the Abyssinian and Italian frontiers.

*Recorded Localities*. Archer's Post, Wajheir. Njoro, Thera (Lönnerberg). Kimiriri River, South Elgon, Suk Hills (van Someren).

*Notes*. Ellenbeck's Decorated Sand-Grouse is a local and northern race of *E. d. decoratus*. Both are birds of the bush-veldt that stretches, practically without a break, from the Tsavo to the N. Uaso Nyiro and beyond. There is, at present, however, no record of either race being obtained between the Simba and the latter river,

though some two hundred miles apart. My collector Bafirawara obtained it in the vicinity of Archer's Post and Wajheir, and Professor Lönnberg found it both north and south of the river. The latter states: "They were very common and arrived at the water-places at Njoro and Thera in flocks, but otherwise when found in the thorn bush they usually occurred in pairs in the months of February and March. Some specimens may represent connecting links between the Somali race and the East African *E. decoratus decoratus*." Both races would appear to be identical in their habits.

*Eremialector gutturalis saturator*.

KENYA YELLOW-THROATED SAND-GROUSE.

*Pterocles gutturalis* Smith.

Sharpe's Hand List, Vol. I. p. 51.

*Pterocles saturator* Hartert.

Reichenow's Vögel Afrikas, Vol. I. p. 306.

*Eremialector gutturalis saturator* Hartert.

Sclater's Systema Avium Ethiop., Part I. p. 158.

*Description: Male.* A black band from the nostril to the eye; a narrow buff stripe from above the nostril to the back of the eye; top of the head dull olive-buff, shading into dull yellowish-buff on the neck; chin, cheeks, and throat yellowish-buff, divided from the neck by a wide black band; back, rump, and upper tail-coverts olive-grey, scapulars blackish with greyish-buff extremities; chest grey, tinged with vinaceous, shading into dark chestnut on the breast, abdomen, and under

tail-coverts; tarsi rufous-buff; tail, middle pair of feathers like the upper tail-coverts, rest black, barred and tipped with chestnut; iris brown; bill dull horn-grey; toes greyish-brown. Length, 335 mm.; wing, 210-220 mm.

*Female.* A brownish-black band from the nostril to the eye, a narrow black stripe from the lores to the back of the eye, and the chin and throat yellowish-buff. Feathers of the top of the head, back, rump, upper tail-coverts, and chest yellowish-buff, each with a wide black shaft-stripe enlarged at the extremity, the upper tail-coverts being also barred with black. Breast, abdomen, and flanks dull rufous-buff closely barred with black; under tail-coverts dark chestnut; middle pair of tail-feathers yellowish-buff, barred with black like the longer upper tail-coverts; rest like those of the male; iris brown; bill horn-blue or slate; feet pale slate. Wing, 200-205 mm.

*Distribution.* Kenya, from the Useri River to the Thika plains.

*Recorded Localities.* Useri River, Simba River, Stony Athi, Athi River. Machako's (Hinde). Kapiti plains (Gurney). Thika (Praed). Kyambu (van Someren).

*Notes.* The Kenya Yellow-throated Sand-Grouse ranges over the plains and the open bush fringing the same, from the Useri to the Thika rivers. It is difficult to apply the term "common" or "plentiful" in a particular locality to any of the Sand-Grouse, as they are so widely scattered over their feeding grounds throughout the day, and travel long distances to water;

and it is only when assembled, for a very short time, at their favourite drinking places that it is possible, approximately, to estimate their numbers. This bird is certainly more numerous on the east side of the Rift Valley than either of its neighbours (*E. d. decoratus* or *P. s. olivascens*), and is found in flocks of six or eight to ten on its feeding grounds, and in much larger flocks of twenty to thirty or even forty to fifty when going to and from drinking places, where it may assemble in hundreds; for instance, on the Useri River, and Simba River near the Railway Bridge. Only once have I met with it in any great numbers, a hundred or more, on open ground and well away from water; this was in August between the Athi and Stony Athi rivers, where it was gathered together mostly in pairs, and about to breed. On the other hand, Mr. Gurney, writing in the *Ibis* for 1909, p. 526, states: "The large packs of Yellow-throated Sand-Grouse which frequented the Kapiti plains were generally tame, and allowed me to approach quite close before they got up, when they would fly a very short distance and settle again." It is possible that Mr. Gurney's packs (met with in April) were attracted by the seeds of a particular weed, in the same way that doves are at certain times of the year (see note under *S. c. tropica*, p. 150). Its call is a guttural, churring cluck. It affords capital sport, as indeed all Sand-Grouse do when approaching, departing from, or circling round a drinking place. It breeds in August on the Athi and Kapiti plains, two to three eggs being laid on the bare ground.

The eggs are pale buff spotted and scrawled with reddish-brown, with underlying spots and blotches of pale mauve. They measure  $44.5 \times 34$  mm.

*Eremialector lichtensteinii sukensis.*

SUK SAND-GROUSE.

*Pterocles lichtensteinii* Temm.

Sharpe's Hand List, Vol. I. p. 51.

Reichenow's Vögel Afrikas, Vol. I. p. 311.

*Pterocles lichtensteinii sukensis* O. Neumann.

Neumann, Orn. Monatsb., 1909, p. 153.

Claude Grant, *Ibis*, 1915, p. 32.

*Eremialector lichtensteinii sukensis* Neumann.

Sclater's Systema Avium Ethiop., Part I. p. 159.

*Description: Male.* General colour pale whitish-buff, throat and neck spotted with black, the rest of the upper parts and chest barred with narrow bands of black; upper breast yellowish-buff, divided in the middle by a narrow dark-chestnut band (sometimes black) and separated posteriorly from the rest of the under parts by a black band, giving the breast a four-banded appearance; tarsi pure white; iris brown; bare skin round eye yellow; feet chrome-yellow. Length, 279-299 mm.; wing, 172-189 mm.

*Female.* Differs from the male in having the whole chest and breast narrowly barred with black, and the barring on the upper parts of the body much finer and closer; iris brown; bare skin round eye yellow, with

a greenish-blue tint; feet ochreous-yellow. Length, 266-279 mm.; wing, 182 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* N. Uaso Nyiro, Lasamis, Lake Hannington, Baringo, Upper Turkwel River, Koromoja. Njoro, Thera (Lönnerberg). Rendili, Samburu (Percival). Lower Turkwel River, Kizibiri River (Cosens). Merille (Cranworth).

*Notes.* The Suk Sand-Grouse ranges east and west throughout the dry, sandy, open bush-veldt of the northern districts of both territories, from near Lorian Swamp to Koromoja. Like all the other species and races, it is widely scattered over the plains and open, stony, thorn-bush country during the day in family parties and small flocks; such lots, of four to ten, were often met with when after bigger game. Towards dusk it assembles in large flights, and arrives at its favourite drinking places when almost too dark to shoot, flying very low, silently, and almost ghost-like; that, at least, is my experience, both on the Turkwel River and also at Lake Hannington, where they drank at a shallow pool in an otherwise dry watercourse south of the lake. It must either drink very little, or gulp down the water very quickly like a dove; probably the latter, as it is up and away almost immediately.

Captain Cosens in his notes (*Ibis*, 1915, p. 33) states: "When the natives had finished watering their livestock, numerous flocks of this Sand-Grouse came to drink after dark in the wells in the river-bed. It was most interesting to watch the steady stream of birds entering

and leaving these deep holes, and that there were no collisions was marvellous." Lord Cranworth in his book "Profit and Sport in British East Africa," p. 412, also remarks on the sudden appearance of thousands at Merille just as it was getting dark.

It breeds in the Baringo district in May, and lays two or three eggs on the bare ground.

*Eremialector quadricinctus lowei.*

LOWE'S FOUR-BANDED SAND-GROUSE.

*Pterocles quadricinctus* (Temm.).

Sharpe's Hand List, Vol. I. p. 51.

Reichenow's Vögel Afrikas, Vol. I. p. xlv.

*Eremialector quadricinctus lowei* (C. Grant).

Claude Grant, Bull B.O.C., Vol. XXXV. 1914, p. 19, and *Ibis*, 1915, pp. 34-36.

Sclater's Systema Avium Ethiop., Part I. p. 159.

*Description: Male.* Lores, forehead, and stripe above eye white, a wide band crosses the forehead just in front of the eyes, and there is an oval black spot above each eye. Feathers of the top of the head each with a wide black shaft-stripe. Upper back, throat, and chest yellowish-buff; rest of back, rump, and upper and under tail-coverts black, barred with white or yellowish-white, narrowly tipped with buff. The chest is bounded by a moderately wide chestnut band, succeeded by somewhat wider bands of pale yellowish-buff and black; the rest of the under parts with narrow bars of white and black; iris brown; bare skin round eye yellow;



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bill dark greenish-brown; feet yellow. Length, 290 mm.; wing, 186 mm.

*Female.* Differs from the male in having no white and black markings on the head, the sides of the neck and base of the throat spotted with black, the chest and upper parts rufous-buff, closely barred with black, the ends of the scapulars and the greater part of the outer web of the wing-coverts yellowish-buff. No pectoral band; iris brown; bare skin round eye yellow; bill black, base yellowish; feet yellow. Wing, 179 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Upper Turkwel River, Koro-mojo. Nakwai Hills, Kittigum (Kitgum), Chua (Cosens).

*Notes.* Lowe's Four-banded Sand-Grouse ranges throughout the plains and open bush-veldt between the Turkwel River and the Nile. On the Upper Turkwel it arrived at dusk, and at the same drinking place with *E. l. sukensis*, but it was quite impossible to distinguish one from the other. Specimens of both were obtained by standing close up to the river bank, and shooting as they approached low down and against the sky-line, like driven birds at home, or by a chance pot-shot at the water's edge when they were quite invisible. In the day-time, it was not met with near the river; it was evidently dispersed over its feeding grounds, and much further afield.

## COLUMBIDÆ.

### *Vinago waalia*.

#### BRUCE'S GREEN PIGEON.

*Vinago waalia* (Meyer).

Sharpe's Hand List, Vol. I. p. 52.

Reichenow's Vögel Afrikas, Vol. I. p. 392.

Sclater's Systema Avium Ethiop., Part I. p. 174.

*Description: Adult.* Head, neck, and upper breast ashy-olive; back, rump, upper tail-coverts, scapulars, and innermost secondaries olive; breast bright yellow; sides olive-grey; abdomen whitish-buff; thighs buff, more or less tinged with yellow; under tail-coverts with broad white-buff edges, the centre of the smaller feathers dark grey tinged with olive, the longer ones chestnut; smaller and median wing-coverts rich vinous; outer median wing-coverts, the greater ones and secondaries edged with yellow on the outer webs; centre tail-feathers leaden-grey, the basal two-thirds of the rest slaty-black; under tail-coverts black with apical grey band; iris claret, with inner rim of blue; bill bluish-white, cere maroon; feet lemon-yellow. Length of *male*, 324–343 mm.; wing, 170–178 mm. Length of *female*, 302–324 mm.

*Distribution.* Uganda.

*Recorded Localities.* Abela, Nyonki, Gondokoro,

Belinia,<sup>1</sup> Kitgum (Cosens). Zombeki River (van Someren).

*Notes.* Bruce's Green Pigeon ranges over the dry, low-lying eastern and northern districts of Uganda, but is confined to well-timbered park-like areas and wooded watercourses. In such places it assembles in great numbers, in lots of four or five, or flocks of fifteen or more, when certain wild fruits are ripe.

At Abela in Teso, large numbers were noted, early one morning, converging from all directions on four rather scraggy-looking Sycamore trees, laden with small figs, in August. In the following April it was so plentiful near the Belinia Hills that a flight of sixty or more dashed out of a single tree, laden with small yellow berries. The sudden rush and rattle of the wings of so many, being quite unexpected and close by, was quite startling.

In habits it did not appear to differ in any way from the other Green Pigeons. It affords first-rate sport, and is a very good table-bird.

Dr. van Someren, writing in the *Ibis*, 1916, p. 210, states: "It was breeding in April. The eggs are white and glossy. The nest was built in a low acacia."

*Vinago calva salvadorii.*

SALVADORI'S GREEN PIGEON.

*Vinago nudirostris* Swains.

Sharpe's Hand List, Vol. I. p. 52.

<sup>1</sup> Now in Sudan territory.

*Vinago calva nudirostris* Swains.

Reichenow's Vögel Afrikas, Vol. I. p. 396.

*Vinago calva salvadorii* Dubois.

Slater's Systema Avium Ethiop., Part I. p. 176.

*Description: Adult.* Head, neck, and under parts olive-green, more or less yellowish; a broad leaden-grey collar at the base of the hind neck, more or less conspicuous; rest of the upper parts olive; flanks olive, edged with yellowish-white; middle of the abdomen pale yellow; tibial feathers bright yellow; under tail-coverts cinnamon, with pale buff edges, the smaller ones partly olive edged with whitish; a patch near the bend of the wing vinous-purple; primary coverts and quills black, the latter with narrow yellow edges; greater wing-coverts and secondaries with broader yellow edges; under wing-coverts leaden-grey, with greenish wash; tail grey, the lateral feathers with a broad, paler apical band; tail underneath black with broad apical grey band; iris silvery-blue with outer rim of lilac (the amount and intensity of each colour varies); bill bluish-white, or white, cere coral-red; feet bright coral-red. Length of male, 295–324 mm.; wing, 165–175 mm. Weight, 8–10 oz. Length of female, 276–300 mm.; wing, 167–171 mm. Weight, 7–8 oz.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Eldoma Ravine, Kisii, Nandi, Kakamega, Ketosh, Mt. Elgon, Bwega, Busoga, Jinja, and many places throughout Uganda west to Toro and north to Bunyoro. Ruwenzori (Doggett). Mt. Maroto

(Cosens). Londiani, Eldoret, Soy (Granvik). Elgeyu, Burnt Forest (van Someren).

*Notes.* Ornithologists are still divided in their opinions on the question of the sub-species of *V. calva* that are found ranging through the greater part of both Protectorates. It appears to me that if the question cannot be settled by colour, or by size, it can be so on the evidence of the bill, as there are well-marked differences. In the Uganda or Western form, which ranges eastward to the Mau escarpment, the cere is *coral-red* or *orange-red*, and extends far back on to the forehead in both sexes, but is more pronounced in the male. In the Eastern form, found throughout Kikuyu and southward to the Teita district, the cere is invariably *orange-yellow*, and extends back on to the forehead much less. I therefore retain Dubois' name, *V. c. salvadorii*, for this the Western race; and regard the birds from Kikuyu and southward as "an Eastern race with *yellow* bill."<sup>1</sup> All the Green Pigeons are subject to local movements, governed by their food supplies. At the Eldoma Ravine, this bird was very plentiful in March, when certain trees were in fruit; at Entebbe it appears in great numbers in February, and again in April, when the yellow berries of the Musasa tree (*Sapium mannianum*), and the fruit of a small parasite fig are ripe. At such times flocks of twenty or more may be seen assembled in one tree. In its first impetuous rush from a tree, and also when flitting from one branch to another, it makes a loud swishing or rattling

<sup>1</sup> See footnote under *V. c. brevicera*.

noise with its wings; otherwise its flight is silent. It also attracts attention to its presence when feeding or resting, and well hidden in a tree top—so very closely does it assimilate with the foliage—by its high-pitched, squeaking chuckle, ending in a deep throaty “croo.” It can hang on to a slender, drooping twig head downwards and pick off a berry as easily as a parrot; in fact it is much more parrot- than pigeon-like. It is extremely good to eat, and in consequence is generally “potted” as it sits, as it is very quick and strong on the wing, and is most difficult to bag owing to its swoop downwards as it leaves a tree. But if given a fair chance, and taken on the wing, few if any birds give better sport.

In Uganda it breeds between January and May, and also in August and September. The nest, a frail platform of small twigs, through which the egg is plainly visible from below, is placed in the fork of a sapling, or at the end of a horizontal branch, and from eight or ten to thirty feet from the ground. At Entebbe, one nest was in the fork of a N'sambya sapling, nine feet from the ground, and in a very exposed position, and yet the bird sat so closely on a single incubated egg that it allowed Mr. C. F. Belcher to stand underneath it. Mr. L. M. Seth-Smith, writing in the *Ibis*, 1913, pp. 505–506, states: “This bird quite realises its extraordinary protective colouring, and acts up to it, remaining absolutely still in a tree when danger threatens, and is then almost impossible to see from below. It builds in May and again in September, usually in quite a conspicuous position. When sitting, this bird seems quite

fearless, and on one occasion I sent a boy up to a nest on which the bird was sitting. It did not fly off until he arrived within reaching distance, and then on to a neighbouring tree, whence it returned several times, circling round close to us. As soon as we left it came back." At the Eldoma Ravine a female, shot on March 17th, had two well-formed eggs in the oviduct, but as a rule only a single egg is laid.

The egg is white, and measures  $31.5 \times 22.5-23.5$  mm.

*Vinago calva brevicera.*

KENYA GREEN PIGEON.

*Vinago nudirostris* Swains.

Sharpe's Hand List, Vol. I. p. 52.

*Vinago calva nudirostris* Swains.

Reichenow's Vögel Afrikas, Vol. I. p. 396.

*Vinago calva brevicera* Hartert and Goodson.

Sclater's Systema Avium Ethiop., Part I. p. 176.

*Description* : Very similar to *V. c. salvadorii*, but the base of the bill is *orange yellow*, and not coral-red as in the latter; the bluish or lavender-grey nuchal band is more sharply defined, and the edges of the rectrices are more or less washed with yellow; iris silvery-blue with outer rim of lilac, or plain silvery-blue; bill white-horn, cere *orange-yellow*; feet bright coral-red. Length of male, 292-326 mm. Length of female, 273-298 mm.; wing, 166-179 mm.

*Distribution*. Kenya.

*Recorded Localities*. Kufunika, Tsavo, Nairobi,

Taveta, Doinyo Narok, Kikuyu, Ngong, Dagoreti. Machako's (Hinde). Upper Tana, N. Uaso Nyiro (Harrison). Thika, Chania (Praed). Embu, Fort Hall, Kiu (van Someren).

*Notes.* The Kenya or Yellow-billed Fruit-Pigeon is the common bird of the Kikuyu country and all round Nairobi, and it ranges south to Taveta.

My first acquaintance with this bird was in a grove of trees with small ripe fruit, between Ndi and the Tsavo River, in January 1892, and I was struck at the time by its yellow bill. Later on it was met with in Kikuyu in great numbers, together with Plaintain Eaters (*T. hartlaubii*) and Hornbills (*B. cristata*), amongst a group of dead trees that had been strangled by a parasite fig, at that time in full bearing; appended is a note made at the time: "*February 1st, 1897.* Many Green-Pigeons attracted by a small yellow fig, now ripe. This is evidently the same bird as the one obtained near the Tsavo River in '92." The specimens obtained were, however, referred to *nudirostris* by Dr. Sharpe, and I was never able to convince him, or Mr. Ogilvie-Grant, that they were different from the Uganda, or Red-billed bird. Subsequently twelve more specimens were added to my collection, and many others were shot for the pot, and carefully examined, including a good bag of ten birds made one evening by Pinto (for many years Bandmaster of the 3rd Battalion K.A.R.), and without exception all of them had the orange-yellow bill.<sup>1</sup> It

<sup>1</sup> The above was written as far back as 1905, together with the preamble to *V. c. salvadori*, and is retained in order to show that



was therefore very gratifying to me when I read Professor Lönnberg's account of the birds collected by the Swedish Expedition of 1911, and found that although he placed his three specimens under *V. c. salvadorii*, he states: "The cere was orange yellow"; and it is still more gratifying to find that Dr. Hartert and Mr. Goodson, in a recent review of the African Fruit Pigeons, recognise this well-marked Eastern race. In its habits it is similar in all respects to *V. c. salvadorii*.

*Vinago wakefieldii wakefieldii.*

WAKEFIELD'S GREEN PIGEON.

Plate IX.

*Vinago wakefieldii* Sharpe.

Sharpe's Hand List, Vol. I. p. 52.

Reichenow's Vögel Afrikas, Vol. I. p. 398.

*Vinago wakefieldii wakefieldii* Sharpe.

Sclater's Systema Avium Ethiop., Part I. p. 176.

*Description: Adult.* Similar to *V. c. salvadorii*, with grey collar at the base of the hind neck, vinaceous and yellow on the wings, and in the under tail-coverts, but differs in the head, neck, and chest being yellower, in the olive parts of the back and wings being also yellower, and in the tail above being olive-yellow instead

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an attempt had been made to separate the two races, on what appeared to a worker in the field to be a well-marked and constant difference; and also to serve as an example of caution exercised by ornithologists of the older school, in contrast to the reckless subdivision practiced by a body of modern extremists.



1 UNACC. VARETHELLI VARETHELLI DI



of grey, and ending in a broad greenish-white terminal bar; iris white, bill white-horn, cere coral-red; feet bright coral-red. Length, 276–292 mm.; wing, 78–89 mm.

*Distribution.* Kenya.

*Recorded Localities.* M'tangani, Witu, and Lamu districts, Mombasa, Masera's, Shimba Hills, Duruma, Taveta. Vanga (Hinde).

*Notes.* Wakefield's Fruit Pigeon is widely distributed along the coastal areas, and extends inland as far as Taveta. In habits it is similar in most respects to the other Green Pigeons, its presence in, or absence from a particular spot being governed by the local supply, or lack of suitable wild fruits. On Mombasa Island, near Kilindini, in a large Sycamore tree, quite leafless, but a mass of small fruits, in February, large numbers assembled, coming and going throughout the day. They arrived in small lots of two or three, and flocks of eight to ten, from all directions on the island, and some from the mainland, completely denuded the tree within a week, and then vanished. On another occasion, in the Shimba Hills, from a small isolated tree with very thick, dark-green foliage and small, yellow berries, a large flock of forty or more dashed out with a rush quite disconcerting, as I passed close by on the blood spoor of a Sable Antelope; that was in January. Two eggs from the same nest were given to me by Mr. S. L. Hinde, who found them in a Mango tree in April, at Vanga. They were slightly smaller than those of *V. c. salvadori*, but were on the verge of hatching, and too

much cracked to keep. Mr. Hinde believes that two eggs is the usual number.

*Vinago delalandii granti.*

DELALANDE'S COASTAL GREEN-PIGEON.

*Vinago delalandei* Bp.

Sharpe's Hand List, Vol. I. p. 52.

Reichenow's Vögel Afrikas, Vol. I. p. 397.

*Vinago delalandei granti* van Someren.

Bull. B. O. C., XL. p. 20, 1919.

*Vinago delalandii* Bp.

Sclater's Systema Avium Ethiop., Part I. p. 176.

*Description: Adult.* Very similar to *V. w. wakefieldii*, but differs from it in the more ashy-olive shade of the head, neck, and breast; the feathers extend further on to the forehead; the vinous patch on the wings is generally paler and more ashy; the remainder of the wing is similar, excepting that the olive parts, as well as the back and tail, are yellower; tail olive-yellow as in *V. w. wakefieldii*, with a broad, terminal band paler, but not so strongly marked; iris a beautiful pale blue; bill very light bluish-ash at the tip, with the basal portion bright orange. Wing, 178-190 mm.

The above is a description of the type race, and *V. d. granti* differs from it in being darker and considerably smaller. Wing, 157-160 mm.

*Distribution.* Kenya.

*Recorded Localities.* Mombasa, Vanga (van Someren).

*Notes.* Professor Reichenow, in his "Die Vögel

Deutsch-Ost-Afrikas," p. 71, published in 1894, records a race of *V. delalandii* from Pangani, and elsewhere in Tanganyika territory. Twenty-five years later Dr. van Someren records it for the first time from the Colony, though, no doubt, in its periodical local movements in search of food it has been a regular visitor, if it is not actually a resident. It is also more than probable that it has frequently been shot, and gone into the pot, in the belief that it was the more common bird (*V. w. wakefieldii*).

All the Green-Pigeons are very much alike in their habits, and it is unlikely that this one should differ sufficiently to attract special attention.

*Columba uncinata.*

GREY WOOD-PIGEON.

*Columba uncinata* Cassin.

Sharpe's Hand List, Vol. I. p. 68.

Reichenow's Vögel Afrikas, Vol. I. p. 401.

Sclater's Systema Avium Ethiop., Part I. p. 162.

*Description: Adult.* Top of the head and neck light cinereous; back and upper wing-coverts dark leaden-grey, each feather edged with light bluish-cinereous, giving a squamous or scale-like character to those parts; rump and upper tail-covert dark leaden-grey, more obscurely edged with ashy-blue; under parts nearly white on the throat, breast vinaceous, flanks ashy-grey, middle of abdomen, thighs, and under tail-coverts white. Quills ashy-black, narrowly edged

externally with white; tail leaden-grey with a single band of grey to white across the middle of all the feathers. Under wing-coverts dark grey, bordered by pale grey or uniform pale grey in the female; iris crimson, bare skin round eye dark red; bill horn grey; feet dull rosy-red (plum colour). Length of male, 384 mm.; wing, 205-214 mm. Weight, 16 oz. Length of female, 332 mm.; wing, 207 mm.

*Distribution.* Uganda.

*Recorded Localities.* Entebbe, Luweza, Ruibala, Mabira, Mpanga, Bugoma. Mpumu (Seth-Smith). Sizibwa (van Someren).

*Notes.* This bird, a true Wood-Pigeon, is confined to the Uganda Protectorate; it is widely distributed and fairly plentiful in all the main forests and larger belts along the lake shore and river banks, but it is a rare bird in collections, owing to the great difficulty in obtaining it. This is due to its frequenting the inner depths of the forest, to its selection of the tallest tree-tops, and to its sitting quite motionless. So difficult is it to see that many times my boy and I have stood for half an hour, and with aching necks,<sup>1</sup> under a calling bird before detecting it. In fact, only once, in the Mpanga Forest, have I seen it low down, and about thirty feet from the ground; this was when three of them were feeding on a small, green, olive-like fruit. It is doubtful whether this bird ever feeds on the ground. On one occasion a pair were seen in quite open country,

<sup>1</sup> A more convenient and restful way is to lie down on the back and look upwards.

but flying direct to a belt of forest, about two miles away. Its call is a deep, low, booming *coo-o*.

Mr. Woosnam, in his notes on the Ruwenzori Expedition, states: "This fine Wood-Pigeon was plentiful in the Mpanga Forest, but was an extremely difficult bird to obtain, as it frequented the tops of the tall trees. Although its deep mournful cooing was constantly heard, it was seldom seen within shot. It was not met with in the forest zone on Ruwenzori." Mr. L. M. Seth-Smith states: "This fine bird is common in the depths of the forest, and its deep *coo* can be frequently heard. Its mating *coo* is very soft and hardly audible a short distance away. A pair was seen together in February, and on a previous occasion in March. I can find out nothing yet about its nesting habits."

*Columba arquatrix arquatrix.*

AFRICAN WOOD-PIGEON.

*Columba arquatrix* Temm and Knip.

Sharpe's Hand List, Vol. I. p. 70.

Reichenow's Vögel Afrikas, Vol. I. p. 403.

*Columba arquatrix arquatrix* Temm and Knip.

Sclater's Systema Avium Ethiop., Part I. p. 161.

*Description: Adult.* Front half of the pileum, cheeks, and neck dark vinous-purple; back half of pileum and occiput grey; back and sides of neck have black bases partially showing through; upper back, smaller scapulars, and inner half of the wing-coverts deep purple-



chestnut, passing on the remainder of the wing-coverts into leaden-grey; lesser scapulars and lesser and median wing-coverts spotted with white at the tip; lower back and rump deep slaty-grey, shading into black on the upper tail-coverts; breast purple-slate, with whitish spots at the tip of the feathers; between the base of the neck and the breast is a broad band of dark purple feathers edged with vinous-purple; abdomen and under tail-coverts slaty-grey; quills brown-black; tail black; iris dark grey, stone-grey, or silvery-grey, some with yellowish tint, bare skin round eye lemon-yellow, sometimes flecked with orange in the male; bill and feet lemon-yellow. Length of male, 394-413 mm. Weight, 14-14½ oz. Length of female, 373 mm. Weight, 10 oz. Wing, 210-235 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Machako's, Nairobi, Meru Escarpment, Mau, Sotik, Marsabit, Eldoma Ravine, Nandi, Elgeyu, Mt. Elgon, Toro. Il-polossat (Harrison). Ruwenzori (Woosnam). Nakuru, Fort Hall, Burnt Forest (van Someren). Kyambu (Granvik).

*Notes.* The African Wood-Pigeon is confined to the forest areas, and between altitudes of 5000 and 10,000 feet, in both the Colony and Uganda, and it is subject to local movements on a very considerable scale; these are governed by its food supply, consisting entirely of various berries and wild olives. Such movements have been witnessed twice; once across the Uasingishu plateau from Nandi to Mau Forest in December, the other from Laikepia to Mau Forest at the Eldoma Ravine

in March. In the former case early in the morning many hundreds, in lots of three or four to a dozen, flew overhead, mostly out of shot, and only one was secured; in the latter they came over in similar lots but at longer intervals, between 3.30 and 5 p.m., and continued to do so for three days. I believe the attraction in the first case was the seeds of the *Podocarpus*; in the second it was certainly the ripe purple berries of a tall undergrowth with tangled stems as hard as boxwood, growing inside the forest. Another large influx occurred at Nairobi in April, when the attraction was the small yellow berries of some trees in a clump near the Waterworks. On that occasion the birds were flying low, and good bags were made by two or three guns, my best being nineteen one evening. Again in September at the Escarpment great numbers were noted flying due west in the early morning, and returning about 5 p.m. At other times it is widely scattered over the forest areas, in small lots. On the wing it affords first-rate sport, but, sad to relate, it is almost, if not quite uneatable after feeding for a few days on either the purple, or the yellow berries mentioned above; the flesh, in whichever way it is cooked, is dark olive-green in colour, is very bitter, and has a medicinal effect on the kidneys that is quite startling, not to say alarming. Mr. Woosnam, writing of this bird in the Mabuku Valley, states: "In December vast flocks frequented the lower slopes of the mountain, but early in March not one was to be seen in the same locality, though higher up the mountains at 8000-9000 feet they

were numerous from the middle of February till the middle of March. They were feeding upon the berries of the *Podocarpus* trees, and were quite unfit for human food; indeed they are probably poisonous if eaten constantly, as we found to our cost." I can find no reference to its call, and cannot remember having heard it. A nest containing one incubated egg was found at the Eldoma Ravine on March 16th; it was in a tall "box-wood" bush on the extreme outer edge of the forest, about ten feet from the ground, and was so scanty that the egg could be seen through it from below.

The egg is white, and measures  $40.5 \times 30$  mm.<sup>1</sup>

*Columba guinea guinea.*

SPECKLED PIGEON.

*Columba guinea* Linn.

Sharpe's Hand List, Vol. I. p. 69.

*Columba guinea longipennis* Reichen.

Reichenow's Vögel Afrikas, Vol. I. p. 402.

*Columba guinea guinea* Linn.

Sclater's Systema Avium Ethiop., Part I. p. 161.

*Description.* Head, throat, body beneath, rump, and upper tail-coverts cinereous, lighter or ashy-white on the rump; feathers of the neck ruddy vinaceous, each feather being bifid at the tip, stiff and inclining to cinereous, with a glossy green tint; back, scapulars, and

<sup>1</sup> In the *Journal* of the East Africa and Uganda N.H. Society, 1913, No. 6, p. 47, there is a very interesting account by Mr. W. M. Congreve of the nesting of this bird in a wild olive tree, and fifteen feet from the ground, in August.

upper wing-coverts vinous-chestnut, the latter with numerous triangular white spots, which also appear on some of the cinereous feathers of the wings; wings dusky-ash colour; tail grey with broad black apical band; iris very narrow, inner line of pale yellow, rest bright carmine or claret colour, bare skin round eyes dull dark carmine or dull maroon; bill black or leaden-grey, cere powdery-white to pale brown; feet mottled bluish-white, and pink to pinky flesh. Length of male, 349-356 mm. Length of female, 346 mm.; wing, 216-236 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Naivasha, Gilgil, Morandat, Mau, Nandi, Mbarara Kigezi. Mt. Elgon (Doggett). Ketosh (Turner). Baringo, Mt. Moroto (Cosens). N. Uaso Nyiro, Njiro (Lönnerberg). Juja (McMillan). Kigalama, Kaimosi, Nyarondo (van Someren). Kisumu (Granvik).

*Notes.* The Speckled Pigeon may be considered a local bird, though widely distributed. It is, or used to be plentiful in the vicinity of Naivasha, and is common at Mbarara in far-distant Ankole. It is generally met with in small lots of three or four, perhaps family parties, and small flocks of eight or ten when feeding on open bare spots on the plains. When it rises the grey rump shows up very conspicuously, as it does in our Rock Pigeon at home. It is, as a rule, tame and not difficult to approach, and when disturbed only flies a short distance before settling again. In Mau Forest abreast of Naivasha, and between 8000 and 9000 feet altitude,

a single male bird was shot as it left a low cliff; and in Nandi another male bird was shot as it left a tree. Both these birds were probably stray ones during a local movement east or west, and were only resting. Professor Lönnberg found it perching, and doubtless breeding in the Dom palms along the banks of the N. Uaso Nyiro.

Its call is a very deep guttural *coo-o*. It used to breed in fair numbers in the steep banks of the Gilgil River below the railway bridge, but now the Naivasha birds mostly nest in Vulture Crag in the Njorowa Gorge at the south end of the lake.

At Mbarara it has developed a remarkable change of habit within recent years; it has become semi-domesticated, and now nests in the roof of the native Anglican Church, the Galt Memorial Hall, and on the top of verandah pillars of European houses; and some of them became so tame as to take food from the hand of Mrs. Neilson, the wife of the Medical Officer. In the Colony, a similar display of confidence in mankind occurred at Juja farm. In this instance, Sir Northrop McMillan informed me that this bird was originally attracted by his tame European birds, that it subsequently interbred with them, their progeny becoming so numerous, both pure and cross-bred, that they nested in close order along the top of the wall of his covered-in cattle *boma*; but in time they were completely cleared out by Gennets and Munguses. Farmers would be well advised to encourage, and afford hospitality to this useful, confiding, and homely bird, as it daily consumes

a vast amount of wind-borne seeds of weeds, and would thereby reduce the sum under the heading "Weeding" in their Labour accounts.

*Streptopelia lugens funebrea.*

DUSKY DOVE.

*Turtur lugens* Rupp.

Sharpe's Hand List, Vol. I. p. 78.

Reichenow's Vögel Afrikas, Vol. I. p. 408.

*Streptopelia lugens funebrea* van Someren.

Sclater's Systema Avium Ethiop., Part I. p. 164.

*Description: Adult.* Upper half of head and nape slaty-grey, paler on the forehead; chin and throat buffy-white, passing into vinous shaded with grey on the sides of the head, neck, and chest; a patch of feathers on the sides of the neck black, with slaty-grey edges; back brown, passing into slate on the rump and upper tail-coverts; abdomen, under tail-coverts, under wing-coverts and also the outermost and smaller wing-coverts slaty-grey; median wing-coverts and scapulars brown, with paler edges; some of the innermost greater wing-coverts and tertials broadly edged with rufous; primaries black, quills brown-black, and secondaries with greyish tinge and with narrow grey edges; central tail-feathers brown, the lateral ones black, with broad apical band of grey; iris golden-yellow, eyelids dark carmine; bill dusky-slate to black; feet unripe-plum colour. Length of male, 289-308 mm.; wing, 175-180 mm. Weight, 5-5½ oz. Length of female, 308 mm.

“ Irides reddish-yellow ; bill dark grey (almost black) ; legs dark reddish-lilac. Wing, 176 mm. Mount Elgon ” (Granvik).

*Distribution.* Kenya.

*Recorded Localities.* Machako's, Nairobi, Naivasha, Gilgil, Il-polossat, Aberdares, Rumuruti, Laikipia, Kamassia, Eldoma Ravine. Kapiti (Gurney). Burnt Forest, Elgeyu, Kyambu (van Someren). Narossura Hills (Cosens). Mt. Elgon, 7000 feet (Granvik). Taveta (Hunter).

*Notes.* The Dusky Dove, is, I believe, only found in localities between 5000 and 7500 feet in altitude, and in open, sparsely timbered country. In July it was very plentiful for about five miles down the Njorowa Gorge, the ancient outlet to Naivasha. At that time the grass had recently been burned, and the ground was strewn with the seeds of the table-topped acacias, and other scorched and leafless thorn bushes. It was always the commonest dove round about Gilgil, and onwards to Rumuruti. To the west of Mau Escarpment it was never seen. But recently Dr. Granvik of the Swedish Mt. Elgon Expedition, in the *Journal für Ornithologie* for 1923, p. 51, reports having obtained it on the mountain, and writes as follows: “ Found in the interior of the dense forests together with *Turturoena delegorguei sharpei*, and always frequented the foliage and the upper branches of the trees, where its dark colour harmonised with that of the branches. Often remained quite still until one got to within a few metres of it.” It is difficult to suggest a reason for such complete isolation and so remarkable a change, a reversal

of habits in fact, and if it is not separable from the open-country bird of the Rift Valley and eastward on account of possible smaller size and darker colouring, it is the most interesting and unaccountable change of habits I know of among birds. Dr. van Someren in the *Ibis*, 1916, p. 212, writes: "Large numbers of these Doves frequented my garden (1913). They had eggs and young in March, May, November, and December." This is also interesting, as I had always regarded it as a very rare bird south of Naivasha, as the following note in my Journal shows: "August 29th, 1906 (Nairobi). Shot a solitary dove (*T. lugens*) near Rifle butts. First one seen in this locality. The Mackakos bird shot 1889 was also solitary. It is evidently rare there too, as Hinde does not appear to have met with it."

Dr. van Someren in *Nov. Zool.* XXIX. 1922, p. 38, reports another, and slightly paler race of this Dove from Turkana, and northern Lake Rudolph.

It is very similar in habits to *S. c. tropica*. A nest with two eggs was found on June 16th; it was placed in a leafless wait-a-bit thorn bush on the northern slopes of the Aberdares.

*Streptopelia semitorquata semitorquata.*

HALF-COLLARED DOVE.

*Streptopelia semitorquata* Rupp.

Sharpe's Hand List, Vol. I. p. 78.

Reichenow's Vögel Afrikas, Vol. I. p. 409.

*Streptopelia semitorquata semitorquata* Rupp.

Sclater's Systema Avium Ethiop., Part I. p. 165.



*Description.* Crown grey, lighter on the forehead, and tinted with rufous-buff in front and on the sides; remainder of the head, neck, and chest deep vinous-pink, paler on the chin and throat; on the hind neck a broad black collar, partially edged above and below with grey; back, inner half of the upper wing-coverts, inner secondaries, and two central tail-feathers brown with an olive gloss, and passing into deep bluish-slate colour on the outer wing-coverts; rump washed with slaty-grey; primary coverts brownish-black; primaries blackish-brown; outer secondaries dark grey; lateral tail-feathers brown-grey, bluish towards the tips, and a blackish band about the middle; the vinous chest passes into leaden-grey on the sides, abdomen, thighs, and under tail-coverts; <sup>1</sup> under wing-coverts slate.

The colour of the iris varies considerably, even in adult birds, and the following have been recorded:

<i>Locality.</i>	<i>Colour.</i>	<i>Noted by</i>
Taveta.	Orange.	Abbott.
Ngong, Kikuyu.	Dark brown with red ring nearest the pupil.	Granvik.
Mount Elgon.	Reddish-yellow.	
Thika.	Chrome-yellow.	G. L. Harrison.
"	Dark, surrounded by red.	Praed.
Nairobi.	Reddish-yellow.	Lönnerberg.

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<sup>1</sup> Dr. Granvik in the *Journal für Ornithologie*, 1923, p. 53, has separated this Dove found on Mt. Elgon into a local race, and has named it *S. s. elgonensis*, mainly on account of the large amount of grey on the under parts, and one or two minor points. They appear, however, to be only individual characters, as in two of my birds, shot the same day at Sabai (Save), one tallies with Dr Granvik's description, but has the grey extending upwards on to the breast, while in the other the vinous-pink of the chest and breast extends downwards on to the abdomen.

<i>Locality.</i>	<i>Colour.</i>	<i>Noted by</i>
Amala River.	Red.	Cosens.
Mt. Moroto.	Red.	"
Entebbe.	Dark hazel, with ring of red or orange.	Woosnam.
Ruwenzori.	Dark hazel, with ring of red or orange.	"
"	Dark brown with a golden rim.	Archer.
Lumbwa.	Dark brown with a ring of gold.	Jackson.
Elgeyu.	Dark brown with very narrow inner rim of bright orange (golden).	"
Nandi.	Dark brown with outer rim of golden-red.	"
Sabai (Mt. Elgon).	Pale crimson.	"
Kavirondo.	Golden-yellow.	"

Bill dull slaty-black; feet rosy-red (unripe plum). Length of male, 330-343 mm. Length of female, 311-314 mm.; wing, 170-190 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Teita, Taveta, Makindu, Simba, Nairobi, Mumoni, Naivasha, Lumbwa, Elgeyu, Kamassia, Nandi, Kavirondo, Save (Sabai), Moyale, Mabira, and westward to Toro. Bugoma, Budongo, Embu (van Someren). Thika (Praed). Amala River, Mt. Moroto (Cosens). Ngong, Kikuyu (Granvik). Mulema (Doggett).

*Notes.* The Half-collared Dove is very widely distributed. It is the largest of the East Central African Doves, and may be met with anywhere except in dense forests and large areas of open plains; and it is much more plentiful in the near vicinity of habitations and cultivations than in the "nyika," "barra," or "gubba"

(wilderness). It is naturally tame and confiding, and may often be seen feeding with fowls and ducks in a kitchen compound. It drinks twice daily, about 8 a.m. and 5 p.m., and will travel many miles to and from water. It is very fast and strong on the wing, and affords good sport when in flight to and from its evening drinking place, but it soon learns the range of a shot gun. Let it not be forgotten, however, by farmers and planters that this Dove, in fact all of the open-country Doves, are their very good friends, and most helpful in keeping down weeds. Its cooing call differs from other Doves, being deeper and louder, and is easily recognised. The call of the male at pairing time is deeper still and more of a growl. The Dove is always associated with everything that is gentle, and is the symbol of Peace, but this bird certainly belies the family reputation, as the males at pairing time are the most desperate fighters. I have witnessed many duels at close quarters. They fight with their wings only. Bird duels are generally vicious but soon over; with this Dove they are prolonged and last many minutes. As they sit on a branch (I have never seen them fight on the ground) the resounding, flicking blows can be heard at a considerable distance, and they often appear to become dazed with fury and the stunning effects of the blows, and will then sit with open bill, panting with exhaustion between the bouts, until finally one of them gives way.

It is only natural that a bird with such a wide range should breed in various localities, at different times of the year. Nests were found in Lumbwa, in September;

at Save, on Mt. Elgon, in February; in Elgeyu, in August; at Nairobi, in January, May, and June; at Entebbe, March to June, and December; and in Toro, in February. In fact, odd pairs probably breed in one locality or another throughout the year.

As a rule the nest is placed from six to thirty feet above the ground. One, in Elgeyu, on the edge of a swamp and well hidden by the tall grass, was in the fork of a small bush, and only two feet above the water. The following note tends to show that the female alone does the work of nest building. "*Entebbe. February 20th.* A pair of *S. s. semitorquata* commenced building a nest in the angle between the frond and stem of a Palm tree, 20 feet from the ground. In the course of half an hour the female settled on the gravel path, strewn with dead and fallen leaf-stems and clusters of dry berries of a Cape lilac, many times, and within a few yards of where I sat. She went to and fro, at intervals of about a minute. She was very particular, picking up and discarding many twigs before finding suitable ones; three of the twigs had dry berries attached. Each time she settled on the path, she gave a sort of purring chuckle. The male bird sat *cooing* in a tree near the nest, looking on and perhaps encouraging her, but affording no assistance."

The nest is a simple platform of twigs, bents, and a few grass stems. Occasionally one is more solid and thicker, and is, I believe, an old nest repaired. The eggs, usually two, sometimes only one, vary a great deal

in size and shape, and are pure white. They measure 28-32 × 22.5-25 mm.

It is a curious fact that Dove's eggs, after being blown, washed out, and wiped dry, should continue to "sweat" through pores that are quite invisible to the eye.

*Streptopelia semitorquata minor.*

LESSER HALF-COLLARED DOVE.

*Streptopelia semitorquata* Rupp.

Sharpe's Hand List, Vol. I. p. 78.

Reichenow's Vögel Afrikas, Vol. I. p. 409.

*Streptopelia semitorquata minor* Erl.

Sclater's Systema Avium Ethiop., Part I. p. 166.

*Description.* Similar to *S. s. semitorquata*, but paler and smaller. Wing of male, 173-176 mm.

*Distribution.* Kenya.

*Recorded Localities.* Manda Island, Kiunga, Lamu, Witu, Mombasa. Shimba Hills (Doherty). M'koi (Turner).

*Notes.* The Lesser Half-collared Dove is a small race of *S. s. semitorquata* that appears to confine itself to the coast regions, but differs in no other respect from its wide-ranging relative. In August, during a trip to the islands north of Patta, for the purpose of collecting the Gulls and Terns in full breeding plumage, and also their eggs, my collector Baraka found this bird breeding in vast numbers, and returned with many clutches of eggs. The scanty scrub and bushes were nowhere more than four feet high, and in some of the bushes

there were three, four, and five nests, and also great numbers on the ground. The two islands he visited were about half a mile from the mainland, and I believe that there cannot be a doubt that he correctly attributed the selection of such sites to the total absence of any natural enemy, in the form of rat, snake, or monitor-lizard. Even Hemprich's Gull appeared to leave it alone, and molested neither eggs nor young.

*Streptopelia fulvopectoralis.*

GRANVIK'S DOVE.

*Streptopelia fulvopectoralis* Granvik.

Granvik in Jour. für Ornith., 1923, p. 54, Plate 2.

Slater's Systema Avium Ethiop., Part I. p. 169,  
Plate 2.

*Description.* The forehead is light grey-brown, the crown and occiput dark grey-brown. The sides of the neck light yellow-brown, cheeks grey, throat white, an indistinct black occipital band, bordered at the top by a wide yellowish-brown band, fringing the dark grey-brown occiput. Back, scapulars, wing-coverts, upper tail-coverts, and the two median rectrices earthy-brown, the latter being dark greyish-blue at the base. The primaries dark brown, the coverts of the secondaries and primaries black. The throat, fore-neck, and breast yellowish-brown, like the flanks. The belly and the under tail-coverts white. Lower wing-coverts brown, with dark patches here and there. The rectrices,

except the two median ones, earthy-brown with dark grey base, and grey wash tipped with white. Bill black; irides citron-yellow; around the eyes there are naked parts, with small red, wart-like formations; feet pale red-lilac. Wing of *female* (type), 144 mm.

*Distribution.* Kenya.

*Recorded Locality.* Kendu (Granvik).

*Notes.* This race is founded on a single female example obtained by Dr. Granvik at Kendu, 'in the dense bush and copse vegetation bordering the shores of Victoria Nyanza in the Kavirondo country.'

*Streptopelia capicola tropica.*

KENYA DOVE.

*Streptopelia damarensis* Finsch and Hartl.

Sharpe's Hand List, Vol. I. p. 79.

*Turtur capicola tropica* Reichen.

Reichenow's Vögel Afrikas, Vol. III. p. 808.

*Streptopelia capicola tropica* Reichen.

Sclater's Systema Avium Ethiop., Part I. p. 167.

*Description: Adult.* Crown leaden-grey, lighter on the forehead and cheeks; sides of the head, neck, and chest pale vinous-grey; chin and throat white; on the hind neck a broad black collar, partially edged above and below with pale grey; back, inner, upper wing-coverts, innermost secondaries, and scapulars greyish-brown, passing into grey on the outer upper wing-coverts; lower back and rump grey-brown along the

middle, grey on the sides; upper tail-coverts grey-brown; middle of the abdomen buffy-white; under tail-coverts white; central tail-feathers brown-grey, the lateral ones black on the basal half; terminal half white on the outer feathers, grey on the inner ones; tail underneath black on the basal half, white on the terminal one, the outer feathers with the outer web white; iris dark brown; bill dull black; feet unripe-plum colour. Length of *male*, 273–279 mm.; wing, 155–163 mm. Weight, 4 oz. Length of *female*, 268–285 mm.; wing, 146–155 mm. Weight, 4 oz.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Eldoma Ravine, Kamassia, Elgeyu, Mt. Elgon, Mangiki, Nyando Valley, Entebbe, Busoga, Kabazi, Ankole, Toro. Amala River, Turkwel River (Cosens). Mohokya (Woosnam). Mulema (Doggett). Namamira (van Someren). Naivasha, Londiani, Eldoret, Soy (Granvik).

*Notes.* There are, I believe, only two races of *S. capicola* to be found in the Colony and Uganda, *S. c. tropica* and *S. c. somalicus*.

This bird appears to range from Mau escarpment, through Kamassia and Elgeyu, westward to Mt. Elgon, throughout the northern half of the basin of Lake Victoria, and as far as Toro. In Elgeyu, on the Upper Turkwel River between Ngabotok and Mt. Elgon, and in the Nyando Valley, it is, perhaps, more plentiful than elsewhere. In Uganda it is not so plentiful as its larger relative (*S. s. semitorquata*) in the populated and cultivated areas, but predominates in the drier, more open



bush and acacia country in western Buddu, Ankole, and Toro. In Elgeyu, it was congregated in immense numbers, and was breeding there in August, together with the Laughing Dove (*S. s. æquatorialis*); and it is scarcely an exaggeration to assert that there was a nest of one or the other in every bush.

During the course of three marches up the valley, large assemblies of these two doves, and also vast flocks of young weavers, were noticed on the ground amongst the scattered bushes and table-topped acacias, where the hard, dry, and red sandy soil was quite devoid of grass, scrub, or other low-lying vegetation. When first noted, the inference was that the birds were merely picking up grit and sand, but later on their great numbers, spread over large areas, the short time spent in one place before moving off to another close by, and the diligence of their search, prompted closer investigation with the aid of a telescope, when it was at once apparent that they were actually feeding. Two well-timed shots into "the brown" accounted for seven doves and about a score of weavers, and on examination, both their stomachs and crops were found to be full of a variety of small seeds. Next day, on a spot where the birds were assembled, I found, after careful search on hands and knees, several similar seeds, and I at once realised that a mystery, to me of long standing, was at last solved. I refer to the appearance of weeds, and other low-growing vegetation, that are met with in patches of varying extent that totally differ in character from their surroundings, and perhaps

many miles away from weeds of the same species. In this case, as the weeds were lying on the surface, they were clearly wind-borne, and were not simply lying dormant. Further evidence on the point was not forthcoming until the advent of the Sclater cart-road, and still later the railway, where they crossed the Athi Plains, the Rift Valley, and other grassy areas. Along the edge of both, and in the little patches of cultivation round the Landis, a variety of flowering weeds sprang up, and yet for miles around there was nothing but grass. If still further evidence was needed, it was supplied by the Agricultural Department's experimental plot of maize, on the open grassy plain about six miles south-east of Sultan Hamud. The crop failed, and within a few months the plot was a blaze of mauve and yellow-flowered weeds, the seeds whereof were doubtless wind-borne, from native cultivations, lying fallow amongst the Ukamba Hills, some eight to ten miles away. My excuse for including the above observations in a book on birds is that I have never seen a reference to the subject in any book on African travel, or met with any East African or Uganda resident of long standing—and I have asked many—who could account for the phenomena. But my principal reason is the hope that they may be regarded as a useful object lesson, and will induce farmers and planters not to kill or frighten away useful birds, in the belief that they are noxious, or who say when they see doves, glossy starlings, weavers, and weaver-finches on one of their recently sown plots or fields, "D—n those birds,

they are eating my seeds." <sup>1</sup> As a fact, they are eating countless seeds of noxious weeds.

Speaking generally, in its habits this bird is very similar to *S. s. semitorquata*, and breeds, in one locality or another within its wide range, all the year round, but mostly between April and July. At Entebbe, one of these doves that had met with a curious accident daily visited, for a period of several weeks, a large bird-bath in Government House garden. The poor bird had a hole, the diameter of a lead pencil, in the centre of its chest, through which the water trickled each time it attempted to swallow; in fact it had to stand erect like a Pouter-Pigeon, and take repeated drinks before it was satisfied. Later on, a dark stain an inch long appeared below the puncture, clearly showing that part of its food was also escaping. The last time it appeared, it was in a dazed condition, so weak, and evidently dying, that I only just failed to catch it with my hand in order to end its suffering. The puncture was probably caused by the broken point of a twig, as the bird blindly plunged into a bush or tree, to escape the stoop of a hawk.

The nest is the usual platform of small twigs, dry creeper-stems, and roots placed in a bush, or tree, and generally within twenty feet of the ground. During

<sup>1</sup> This actually occurred one evening at the Ravine in '97, when Mr. P. W. Dowse, Messrs. Smith Mackenzie's representative, used the expression, with some feeling, as he pointed to a number of doves busily feeding on a recently planted plot in his kitchen garden. My immediate reply was to "pot" one in the act, cut open its crop, and show him nothing but a mass of tiny seeds; and he was quite satisfied that he had not sown them!

its construction the bird, presumably the female, on arrival with a piece of material utters a curious harsh note as if of complaint.

The eggs measure 20–30 × 22–23 mm.

*Streptopelia capicola somalica.*

SOMALI DOVE.

*Streptopelia damarensis* Finsch and Hartl.

Sharpe's Hand List., Vol. I. p. 79.

*Turtur capicola somalicus* Erl.

Reichenow's Vögel Afrikas, Vol. III. p. 808.

Sclater's Systema Avium Ethiop., Part I. p. 168.

*Description.* Similar to *S. c. tropica*, but paler above and below; under parts less vinous and whiter, also paler grey on the wings. Wing, 150–160 mm.

*Distribution.* Kenya.

*Recorded Localities.* Voi, Teita district, Tsavo, Taveta, Kibwezi, Makindu, Simba, Doinyo Narok, Athi River, Baringo, Moyale, Wajheir. Samburu, Masongoleni, M'buyuni, Maungu (van Someren). Njoro (Lönnerberg).

*Notes.* The Somali Dove, so far as we know at present, is confined to the Colony east of the Rift Valley, and ranges from the Abyssinian and Italian frontiers to the Taru wilderness, and possibly further south. In the Teita district, between the Voi and Tsavo rivers, and again between Kibwezi and Simba, it is particularly plentiful. One afternoon about four o'clock, on the plain near Simba station, between miles 225 and 234, many thousands of this little Dove were feeding out in the open, by the side of the line,

and on being disturbed by the train, rose in flocks of a dozen to a couple of hundred; a most remarkable congregation. At one point there were many hundreds of them on the wing at the same moment. The grass had been burnt a few days before, and no doubt this vast concourse was attracted by some kind of specially relished seed.

On another occasion near mile 225, and within a few hundred yards of where I sat on the cow-catcher, a Lanner Falcon (*F. b. biarmicus*) stooped three times at one of these Doves. Twice the sorely pressed little bird escaped by suddenly dipping to within a few inches of the ground, and the third time only by literally flinging itself into a thick-foliaged bush. Compared with its very near relation, *S. c. tropica*, it is more a denizen of the low-lying, and dry, arid bush-veldt, but in its habits generally it is identical. At Baringo it was breeding in great numbers in September, and both its nest and eggs are indistinguishable.

*Streptopelia vinacea barbaru.*

SUDAN VINACEOUS DOVE.

*Streptopelia vinacea* Gm.

Sharpe's Hand List, Vol. I. p. 79.

*Turtur vinaceous* Gm.

Reichenow's Vögel Afrikas, Vol. I. p. 412.

*Streptopelia vinacea barbaru* Antin.

Sclater's Systema Avium Ethiop., Part I. p. 168.

*Description: Adult Male.* Head and neck vinous-pink, paler on the forehead, and fading into white on

the chin, the throat, and the lower abdomen, vent, and under tail-coverts; on the crown and occiput a slight greyish tinge; a black line in front of the eyes; on the hind neck a broad black collar, edged above with whitish; back scapulars and inner half of the wing-coverts earthy-brown; rump and upper tail-coverts greyish-brown; outer upper wing-coverts pale grey, with lighter edges; quills with narrow light edges; two central tail-feathers earthy-brown like the back, the next two bluish-grey, whitish towards the tips and black at the base of the inner web; remainder of tail-feathers black at the base, white at the apical part; the outer feathers also have the basal part of the outer web edged with white; iris brown; bill dull black; feet rosy-red (unripe-plum colour). Length, 247–258 mm.; wing, 133–153 mm.

*Distribution.* Uganda.

*Recorded Localities.* Northern Busoga, Teso, Soroti, Achole, Kibazi, Buruli, Mubendi.

*Notes.* The Sudan Vinaceous Dove was first met with in Teso, but was subsequently found ranging as far to the south-west as Mubendi. It is chiefly remarkable for a very pronounced difference in its call notes, a difference difficult to describe, but which when heard is very marked, and cannot help attracting attention. Otherwise it does not appear to differ from *S. c. tropica*, and in the field might very easily be mistaken for the latter, in those localities like Mubendi, where they meet.

*Streptopelia decipiens permista.*

## YELLOW-EYED DOVE.

*Streptopelia ambigua* Bocage.

Sharpe's Hand List, Vol. I. p. 79.

*Turtur ambiguus permistus* Reichen.

Reichenow's Vögel Afrikas, Vol. III. p. 808.

*Streptopelia decipiens permista* Reichen.

Sclater's Systema Avium Ethiop., Part I. p. 166.

*Description.* The upper parts very similar to *S. d. perspicillata*, but with much darker under parts, the abdomen and under tail-coverts being grey; the grey on the wing-coverts is also much darker; iris yellow (ochreous), or pale golden-yellow, bare skin round eye crimson-red; bill black; feet rose-red. [Irides citron-yellow; bill black; legs pale dark blue-lilac or coral-red. (Granvik).] Length of *male*, 298–310 mm. Length of *female*, 298 mm.; wing, 155–170 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Berkeley Bay, Samia Hills, Kisumu, Lower Nyando Valley, Bugaya Island, Mohokya, Kikarongo. Kendu (Granvik). Speke Gulf (van Someren).

*Notes.* This Yellow-eyed Dove of the *S. decipiens* group is as widely distributed and local as Fischer's Dove. It is common at Berkeley Bay, and along the western foothills of Samia, to the lower parts of the Nyando Valley bordering the lake. To the west, in Uganda, it crops up on Bugaya Island, on the Katonga

River, and at Mahokya, three widely separated localities all under 4000 feet in altitude; but was not seen or heard in the intervening areas. In habits it is similar in all respects to the eastern race (*S. d. perspicillata*), and has exactly the same curious chuckling call, that is bound to attract attention. On a tiny island close to Bugaya, a nest with two eggs was found in May, and at Kisumu two nests, with two and one egg respectively, were found in bushes, and about seven feet from the ground, in June. The eggs are indistinguishable from *S. d. perspicillata*.

*Streptopelia decipiens perspicillata.*

FISCHER'S DOVE.

*Streptopelia ambigua* Bocage.

Sharpe's Hand List, Vol. I. p. 79.

*Turtur ambiguus perspicillatus* Fischer and Reichen.

Reichenow's Vögel Afrikas, Vol. I. p. 417.

*Streptopelia decipiens perspicillata* Fischer and Reichen.

Sclater's Systema Avium Ethiop., Part I. p. 167.

*Description.* Forehead and crown and cheeks grey, fading into white on the chin and centre of throat, and passing into vinous-pink on the back of the head and lower portion of the cheeks; neck and chest vinous-pink; a black collar edged above with white; upper parts earthy-brown; marginal upper wing-coverts pale grey; the outer secondaries and sides of the rump washed with grey; central tail-feathers like the back; basal half of remainder slaty-grey, the apical portion



grey, fading into white at the tips; the outer one on each side narrowly margined with white; the vinous of the breast shades off on the flanks into grey; abdomen and under tail-coverts white; basal half of tail-feathers black, the rest white; iris silvery-white with pale pinky tint, bare skin round eye pink; bill black; feet unripe-plum colour. Length, 297-308 mm.; wing, 158-166 mm.

*Distribution.* Kenya.

*Recorded Localities.* Simba, Kiboko, Baringo. N. Uaso Nyiro, Lekiuundu River (Lönnerberg). Lower Turkwel River (Cosens).

*Notes.* Fischer's Dove, as will be seen from the above localities, has a wide range, but is distinctly local; and altitude very clearly plays an important part in its selection of suitable quarters. Its requirements are dry heat, plenty of shade, water, and a sandy soil. It is slightly smaller than *S. s. semitorquata* and paler; but at a distance might easily be mistaken for the latter. At close quarters its silvery-white eye is a distinguishing feature, but the most marked difference between the two is its curious call, a soft and drawn-out chuckling *coo-o* uttered almost invariably just as it is on the point of settling in a tree. At Simba it is not uncommon among the table-topped acacias, bordering the river, and also at Kiboko, but it was neither seen nor heard at Makindu. At Njemps it is common, and on the N. Uaso Nyiro Professor Lönnerberg also found it to be "common in the acacia-steppe." At Baringo, in September, a nest with two eggs was found

in a large bush, six feet from the ground. It was the usual frail platform of twigs.

The eggs are white and measure  $29 \times 22.5-25$  mm.

*Stigmatopelia senegalensis æquatorialis.*

EQUATORIAL LAUGHING DOVE.

*Stigmatopelia senegalensis* Linn.

Sharpe's Hand List, Vol. I. p. 80.

*Turtur senegalensis æquatorialis* Erl.

Reichenow's Vögel Afrikas, Vol. I. p. 406.

*Stigmatopelia senegalensis æquatorialis* Erl.

Sclater's Systema Avium Ethiop., Part I. p. 170.

*Description: Adult.* Head, neck, and breast rich vinous, slightly paler on the chin and centre of the upper throat, and fading into white on the abdomen; vent and under tail-coverts white; a broad collar round the front and sides of the neck formed of black bifid feathers broadly tipped with rusty colour; back and scapulars rusty-vinous with a greyish tinge; lower back, rump, upper wing-coverts, and secondaries leaden-grey; upper tail-coverts greyish-brown; primaries black, with narrow light edges, the inner ones tinged with grey; central tail-feathers brown-grey; the next pair leaden-grey, the remainder slaty-black at the base, then grey and fading into white towards the ends, the white increasing towards the outer feathers, which are edged with white on the outer web; tail below, black at the base, white on the apical half; iris dark brown; bill black; feet light to dark unripe-

plum colour. Length of male, 259–273 mm.; of female, 239–270 mm.; wing, 132–144 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Voi, Makindu, Simba, Mackakos, Athi River, Emberre, Elgeyu, Baringo, Kamassia, N. Uaso Nyiro, Turkana, Upper Turkwel River, Jinja, Entebbe, Kampala, Masaka, Butambala, Mubendi, Buddu, Ankole, Singo, Mawokota, Bulemezi, Toro. Upper Tana (Harrison). Mombasa (Fischer). Taveta (Abbott). Narossura River, Annamuget, Bokoro (Cosens). Kagio, Fort Hall, Juja, Luazomala River (Lönnerberg). Machako's (Hinde). Kendu Bay, Kisumu, Nairobi, Tsavo, Maungu (van Someren).

*Notes.* The Equatorial Laughing Dove ranges from the coast to the Belgian frontier, but appears to avoid localities above an altitude of 5600 feet. It varies in plumage to a remarkable extent, and this may be due to age, season of the year, or anything else but locality.

It is particularly common in Elgeyu, the Baringo district, and also on the Upper Turkwel River. In Uganda it is more plentiful in the dry localities and acacia country of Ankole, Toro, and the Nile districts, than in other parts. At Entebbe it is a very rare bird, but is plentiful in Mengo, at certain times, and many are, or were, caught by natives and sold to the Indians, who kept them as pets. It was very tame in the compounds and market places in February and March, and then disappeared; probably dispersed in the neighbourhood for the breeding season, between April and June. In Elgeyu it was breeding in great

numbers in August, and at Njamps, in September. Dr. van Someren found many nests near Kisumu, but does not give dates. One of its crooning calls ends in a purring chuckle which has led Europeans to refer to it as the "Laughing Dove."

Its frail nest of a few twigs is generally placed in a bush, or small tree, and from five to fifteen feet from the ground. One was in a Grenadilla vine on the verandah of the District Commissioner's house at Masaka, and was within three feet of where I sat; and it was by the merest chance that I caught sight of the little beady eye of the sitting bird, through the trellis-work and the greenery beyond. The eggs are nearly always two in number, pure white, and measure 25-27 × 20.5-21 mm.

*Turturæna delegorguei sharpei.*

SHARPE'S FOREST-DOVE.

*Turturæna sharpei* Salvadori.

Sharpe's Hand List, Vol. I. p. 72.

*Turturæna delegorguei sharpei* Salvadori.

Reichenow's Vögel Afrikas, Vol. I. p. 418.

Sclater's Systema Avium Ethiop., Part I. p. 163.

*Description: Adult Male.* Forehead ashy-grey; head, hind neck, and sides of the neck bright metallic-green, with a violet gloss in some lights. Interscapular region white, as well as the tips of some of the green feathers of the lower hind neck. Back and wing-coverts coppery-brown, with green and purple reflections on the edges

of the feathers. Lower back, rump, and upper tail-coverts deep blackish-grey, with the same green and purple reflections, and a narrow, slaty-grey border. Wings blackish-brown. Throat dark grey; underside of neck and breast deep slaty-grey, each feather with a broad greenish-purple border. Lower breast and abdomen deep vinaceous-purple, fading into sky towards the vent. Under tail-coverts and flanks slate-grey.

To the above may be added the following note by Dr. van Someren, in *Nov. Zool.*, XXIX. 1922, p. 25 :

“ From the same locality we get males with green, and others with purplish-bronze heads, some with metallic sheen to the red of the back, some without. Some have velvet-black backs, others black with greenish reflections. Similarly the presence or absence of metallic sheen on the under surface is variable. The young male is very like the female, but the coppery-bronze of the head is dulled by the greyish tips to the feathers.”

Iris (of female from Mt. Kenya), yellow; bill slate; feet pale crimson. Length, 295 mm.

“ Iris, reddish-yellow (colour of the yolk of an egg) in young bird, but in old ones it assumes a red-lilac colour. Wing of male, 177–182 mm.; of female, 160–173 mm.” (Granvik).

*Distribution.* Kenya ; Uganda.

*Recorded Localities.* Mt. Elgon, Mt. Kenya, Njogis, Nairobi, Kyambu, Thika Escarpment (van Someren).

*Notes.* Sharpe's Forest-Dove, of which only the head and neck of a single bird exists, was met with in dense forest high up on Mt. Elgon; the body of the specimen was deliberately blown to pieces at short range,

as the bird was so obviously something quite new to me that the risk of giving it a sporting chance in such surroundings was too great to take. Dr. Granvik, of the Swedish Mt. Elgon Expedition, obtained fourteen examples on the east side of the mountain at altitudes between 6000 and 8000 feet, and in the *Journal für Ornithologie*, 1923, writes as follows: "This *Turturoena* was very common in the forests on the eastern slopes of Elgon. During the day it remained for the most part inactive and was then seldom seen, but in the mornings it was astir, and one could hear it *cooing* everywhere in the dense foliage. The bird is met with as high up as 8000 feet above sea-level."

It is also found on Mt. Kenya, where a single specimen, a female, was obtained in the forest above Njogis, in August. Next day, a pair believed to be this bird flew close past me, and across a deep ravine from a patch of forest on my side, and disappeared into the main forest beyond. A note on the female referred to reads: "It appears to be very similar in habits to *A. l. larvata*, and is just as elusive." Dr. van Someren has since obtained it near Nairobi, and elsewhere in the Kikuyu forests.

*Cena capensis.*

LONG-TAILED DOVE.

*Cena capensis* Linn.

Sharpe's Hand List, Vol. I. p. 83.

Reichenow's Vögel Afrikas, Vol. I. p. 429.

*Cena capensis capensis* Linn.

Sclater's Systema Avium Ethiop., Part I. p. 171.

*Description : Adult Male.* Front part of the head and entire throat black, remainder of the head grey; hind neck, back, scapulars, inner wing-coverts, and innermost secondaries pale brown, shading into pearl-grey on the sides of the neck and on the remainder of the wing-coverts; lower back with two broad black bands, between them a pale brownish-buff band; upper tail-coverts brown-grey, edged with black; breast and abdomen white; under tail-coverts black, but the outer ones white; primary-coverts and quills cinnamon, with broad blackish-brown outer edges and tips, the last more or less grey; the inner upper wing-coverts have large steel-blue patches; outer under wing-coverts cinnamon, the inner ones and axillaries black; tail above grey, the central feathers and the next two pairs blackish towards the tips, the remainder have a black subapical band, and the tip grey, the outer edge of the outer feathers mostly white; iris brown; bill dull dark carmine, with orange-yellow tip; feet dark rosy-red or unripe plum. Length, 242–254 mm.; wing, 98–99 mm.

*Adult Female.* Differs from the male in having no black on the head and throat; forehead, cheeks, chin, and throat white, slightly greyer towards the crown, which is brown like the back; ear-coverts, sides, and front of the neck, and crop pale ashy-brown; iris brown; bill dull carmine, with dusky tip; feet plum colour. Length, 235–253 mm.; wing, 100–103 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Manda, Lamu, Taveta, Makindu, Kiu, Baringo, N. Uaso Nyiro, Moyale, Kibero, Butiaba,

Bulemezi, Entebbe. Juja (Lönnberg). Tsavo (Praed). Loita, Kamchuru, Nimuli (Cosens). Kisumu, Kyetema, M'buyuni, Kalwanga, Simba, Manngu, Jinja (van Someren).

*Notes.* The beautiful, dainty, and sprightly little Long-tailed Dove ranges throughout the Colony and Uganda from the coast to the Belgian Congo frontier. It is subject to local movements, and will appear in a spot, often in large numbers, remain a short time, and then vanish. It is, however, rather more than less of a resident, as it has been observed in every month of the year, except May and June; and at Baringo it was found breeding on September 20th, and at Kisumu in March by Dr. van Someren.

At a shooting camp near Taveta, in January, immense numbers came to drink at the river at 10.30 a.m. and sat so close together on low bushes, awaiting their turn, that ten of them were secured with a single charge of No. 8 shot; three days later they had disappeared, and none was seen in the neighbourhood.

Again, at Makindu, it was very plentiful in July, but three weeks later it was gone. These movements are, no doubt, governed by their food supplies of small wind-borne seeds, mostly of weeds, that can only be seen on bare ground devoid of grass or low-lying vegetation that would otherwise prevent it from walking about freely. A dry road is a much-favoured feeding ground, and as an illustration of this partiality, the following note from my diary may be quoted: "*January 7th.* From the cow-catcher saw great numbers of *Cena*



*capensis*, single birds, in pairs, and lots of three or four on the permanent way between Athi River and Makindu."

A nest, a tiny, flimsy platform of roots and convolvulus tendrils, was placed practically on the top of a creeper-covered clump of tooth-brush shrub (*Salvadora persica*) and barely two feet from the ground, the two eggs being easily seen from above. Dr. van Someren also found a nest, at Kisumu, in a similar position, "on the top of an ant-heap overgrown with weeds."

The eggs are pale cream colour and measure  $20 \times 15$  mm.

*Turtur abyssinica delicatula.*

NILE BLACK-BILLED BLUE-SPOTTED DOVE.

*Chalcopelia delicatula* Sharpe.

Bull. B.O.C., No. XC. Vol. XII. 1902, p. 84.

Reichenow's Vögel Afrikas, Vol. III. p. 811.

*Turtur abyssinica delicatula* Sharpe.

Sclater's Systema Avium Ethiop., Part I. p. 172.

*Description.* Similar to *T. c. chalcospilos*, but paler grey on the crown and more white on the forehead, *steel-blue* spots on the wings, and under parts much paler and only slightly washed with vinous; chin and throat white; iris brown; bill black; feet and toes dull claret (Cosens).  
Wing, 104 mm.

*Distribution.* Uganda.

*Recorded Localities.* Gondokoro (Cosens).

*Notes.* The Nile Black-billed Blue-spotted Dove was





x | TURTUR AFRA KILIMENSIS

seen between Nimuli and Gondokoro,<sup>1</sup> but was not obtained, and as it is not improbable that it extends south-west into British territory on the left bank of the Nile, it is included, provisionally, in this work. Captain Cosens obtained it at Gondokoro, but says it was not seen until that point was reached.

*Turtur afer kilimensis.*

BLUE-SPOTTED DOVE.

Plate X, Fig. 1.

*Chalcopelia afra* Linn.

Sharpe's Hand List, Vol. I. p. 83.

Reichenow's Vögel Afrikas, Vol. I. p. 426.

*Turtur afer kilimensis* Mearns.

Sclater's Systema Avium Ethiop., Part I. p. 172.

*Description: Adult Male.* Crown of head leaden-grey, fading into white on the forehead; upper parts ruddy-brown; across the lower part of the back two broad stripes with a buff or pale brown stripe between them; upper tail-coverts edged with black at the tips; chin and middle of the throat whitish; sides of the head, front, and sides of the neck and breast vinous, fading into buffy-white on the abdomen and vent; under tail-coverts black except the outer ones, which are white; primary-coverts and quills bright cinnamon, edged on the outer web, and tipped with dark brown; some of the scapulars have boldly marked steel-blue patches on their outer webs; axillaries and under wing-coverts

<sup>1</sup> Now in Sudan territory.

bright cinnamon; four central tail-feathers brown, shading into brownish-black at the tip; the lateral feathers grey with a broad brownish-black apical band, and more or less tipped with grey; the outer feathers have the base of the outer web greyish-white; iris brown; bill dull carmine, fading to pinkish-yellow at the tip; feet unripe plum.

Length of male and female, 215-228 mm.; wing, 106-112 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Save (Sabai), Mangiki, Bwegas Busoga, Owelo, Mabira, Entebbe, Mubendi, Rusassa, Buddu, Toro, Ankole, Mowokota. Magada, Sanga, Kytama, Kyanja, Busiro (van Someren). Mubuku Valley, Mohokya (Woosnam). Mulema (Doggett). Mpumu (Seth-Smith). Bugoma Forest (Neave). Mt. Elgon (Kemp).

*Notes.* The Blue-spotted Dove is widely distributed, and whether found in bush, on the edge of thick forest, or open forest, in densely populated and highly cultivated areas, or in gardens, it always attracts attention by its curious, low, and prolonged cooing-call. The first note is so low as to be almost inaudible; it then runs up the scale, getting slightly louder, for six to eight notes, and then runs down much quicker, until it appears to stop for want of breath. During the breeding season, this call is often so incessant and monotonous as to become exasperating to some persons of highly-strung nervous temperament. It is much more often met with singly than in pairs, and only occasionally three together. It is a very tame and fearless little bird, and

will often allow itself to be approached to within a few yards—and when on the ground is much given to crouching and relying on its colouring to escape detection. I have many times seen my spaniel run past on the windward side, and within eight to ten feet of one as it crouched. It also, no doubt, relies on its quickness in rising and getting under way; in this respect it strongly resembles a Nightjar.

It may be found breeding at almost any time; Mr. Belcher and I found nests at Entebbe during every month in the year except March and November.

The nest, a tiny frail platform of rootlets, is generally placed in the fork of a small tree, and from six to fifteen feet from the ground; in Uganda ambatch trees growing on the lake edge are much favoured. At Entebbe I have twice found a pair occupying the old nest of a thrush (*T. p. centralis*) with the simple addition of a few pliant roots.

The two eggs are a soft, dull cream colour, and measure 21–22.5 × 16.5–17.5 mm.

*Turtur chalcospilos chalcospilos.*

GREEN-SPOTTED DOVE.

Plate X, Fig. 2.

*Chalcopelia afra* Linn.

Sharpe's Hand List, Vol. I. p. 83.

Reichenow's Vögel Afrikas, Vol. I. p. 426.

*Turtur chalcospilos chalcospilos* Wagler.

Sclater's Systema Avium Ethiop., Part I. p. 172.<sup>1</sup>

<sup>1</sup> I agree with Mr. Sclater that von Erlanger's *T. c. somalica* cannot be regarded as a race. Birds from British Somaliland are not distinguishable from those in the Colony.

*Description.* Much greyer above, and paler vinous below, and also smaller than *T. a. kilimensis*, and with *metallic-green* spots on the wings; iris brown; bill dull carmine or dark maroon, tips black; feet purple-carmine. Length, 194–206 mm.; wing, 98–107 mm.

*Distribution.* Kenya.

*Recorded Localities.* Witu, Mombasa, Masera's, Maungu, Taru, Voi, Tsava, Nairobi, Elgeyu, Baringo, N. Uaso Nyiro, Marsabit, Moyale. Shimba Hills (Doherty). Mt. Leganisho, S. Uaso Nyiro, Amala River, Weiwei River (Cosens). Taveta (Hunter). Athi River (Delamere). Malindi, Mambrui (Fischer). Mulema (Doggett). Chanler's Falls (Lönnerberg). M'buyuni, Tsavo (van Someren).

*Notes.* The Green-spotted Dove is common all along the coast, and particularly so in the Taru Wilderness between Masera's and Maungu. It is much more a bird of dry bush-veldt than the Blue-spotted bird, but in habits the two species are very similar, and have the same attractive, long-drawn-out crooning call. If anything it is more unsociable, and is generally found by itself. A nest was found in January on the bank of the Tsavo; it was in the fork of a small acacia, barely three feet from the ground, and was quite exposed. The nest was a frail platform of a few twigs and tendrils. Dr. van Someren in the *Ibis*, 1916, p. 213, states that they were nesting in July.

The eggs are pale cream colour, almost white, and measure  $23.5 \times 17-18$  mm.

*Tympanistria tympanistria fraseri*.

FRASER'S WHITE-BREASTED WOOD-DOVE.

*Tympanistria tympanistria* Temm. and Knip.

Sharpe's Hand List, Vol. I. p. 83.

Reichenow's Vögel Afrikas, Vol. I. p. 424.

*Tympanistria tympanistria fraseri* Bonaparte.

Sclater's Systema Avium Ethiop., Part I. p. 171.

*Description: Adult Male.* Upper parts brown, forehead, superciliary stripes extending to the sides of the occiput; cheeks and *under parts pure white*; lores dark brown, sides of the neck more grey than the upper parts; across the rump two broad black bands, more or less distinct, of blackish-brown, and between them a pale greyish-brown band; a similar but almost obsolete band borders the second dark band; under tail-coverts brown-grey; on the inner wing-coverts and inner secondaries some dark spots varying from metallic-green to dark purple, almost black; primary-coverts and primaries cinnamon; six centre tail-feathers uniform brown, with a reddish tinge, the outer three pairs shade into grey with a broad sub-terminal black band; iris brown; bill black, basal half dull carmine; feet unripe-plum colour. Length, 221–235 mm.; wing, 110–118 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Mombasa, Taveta, Nairobi, Eldoma Ravine, Marsabit, Mabira, Toro, Buddu, Bugoma. Mesu (Lönnerberg). Amala River (Cosens). Sezibwa, Kyetema, Kivuvu Kyambu, Budongo (van Someren). Mpumu (Seth-Smith). Ruwenzori, Mohokya



(Woosnam). Shimba Hills (Doherty). Takaungu, Wapokomo (Fischer).

*Notes.* Fraser's White-breasted Wood-Dove ranges throughout the Colony and Uganda, but confines itself to forests, woods, and wooded watercourses. It is a shy bird, and difficult to see, particularly its back view, as it sits in the gloom of its surroundings. It is so quick on the wing, and twists about so suddenly in its forest fastness, that it rarely affords more than a glimpse and a snap-shot, and it is safe to assert that 95 per cent. of the specimens in collections have been "potted" sitting. On the rare occasions it is seen in the open, passing across a forest glade, or from one patch of cover to another, it almost invariably flies low down, as if purposely to hide its conspicuous white under parts. It is generally seen by itself, and only occasionally in pairs. Its call is similar to that of the Blue- and Green-spotted Doves (*Turtur a. kilimensis*, and *T. c. chalcospilos*), but softer, and not so drawn out. Dr. van Someren in the *Ibis*, 1916, p. 213, describes it as "a sweet sound, unlike that of other Doves; the first two coos are loud and prolonged, followed by seven coos, gradually diminishing in intensity and tone, so that the last is almost inaudible."

At Entebbe, in November, Mr. Belcher found a nest in a wild date-palm in the Botanical Gardens. Three other nests were found by myself; one, in March, was placed on the top of an old Coly's nest in an orange tree; another, in July, in a *Dracoena*; and the third, in October, in a fig tree; and all were in large and gloomy banana plantations, and about ten feet from the ground.

Mr. Seth-Smith in the *Ibis*, 1913, p. 506, states: "It nests in March" (at Mpumu). The nest is the usual scanty platform of twigs and roots. The eggs are larger than those of the Blue- and Green-spotted Doves, and a much paler cream colour. They measure  $24 \times 19$  mm.

*Aplopelia simplex jacksoni*.

RUWENZORI FOREST-DOVE.

*Haplopelia jacksoni* Sharpe.

Sharpe, Bull. B.O.C. Vol. XIV. p. 93, 1904.

*Aplopelia simplex jacksoni* Sharpe.

Sclater's Systema Avium Ethiop., Part I. p. 174.

*Description: Adult Male.* Forehead very pale grey, or white shading into bluish-grey on the crown; occiput, hind neck, and scapulars bronzy-pink or bronzy-green; back and wings indigo-black to dark brown; chin and centre of throat white; cheeks and lower throat pale grey, sides of neck darker grey; breast bronzy-pink to dull brownish-grey with green reflections; flanks dark grey; abdomen greyish-white; under tail-coverts white; tail about the same as the back with the apical portion grey; iris reddish-brown, purple, or mauve; eyelids carmine; bill black; feet light plum colour, pink, or dull red. Length of male, 262 mm.; wing, 148-162 mm.

*Adult Female.* Differs from the male. Upper parts are earthy-brown, shading into bronzy-rufous on the upper mantle, nape, and occiput, with no trace of grey, violet, or green-glossed mantle, which characterises the

male; the entire under parts below the neck, as well as the under tail-coverts, are rich vinous.

*Distribution.* Uganda.

*Recorded Localities.* Ruwenzori, Mubuku Valley, Bugoma, and Mabira forests. Budongo (van Someren).

*Notes.* The Ruwenzori Forest-Dove appears to be confined to the primeval forests of Uganda and Bunyoro, and the forest zone of Ruwenzori between 6500 and 9000 feet. The type was obtained by Mr. G. F. Archer, who saw one other example during the twenty days he spent in the Mubuku Valley. This, coupled with the fact that three out of the four members of the Ruwenzori Expedition succeeded in obtaining only five examples in four months, shows that it is just as elusive and well able to take care of itself as its Kenya relative (*A. l. larvata*). Mr. Woosnam writes as follows: "Jackson's Dove was found only on Ruwenzori; it frequented the forest and lower half of the bamboo-zone and, though not uncommon, was a difficult bird to procure. We often saw a dove in the same region which appeared to be smaller and almost black in colour, but it was always met with among the thickest and darkest parts of the forest, and for some months we failed to obtain a specimen. We nicknamed this bird the 'Black Dove.' Eventually Mr. Carruthers shot what we believed to be a 'Black Dove,' and it proved to be a young example of *H. jacksoni*."

Whether this was really the bird we named the Black Dove or not is uncertain, for it was always very shy and remarkably strong on the wing, and never conveyed the

impression of being an immature bird. On May 18th my collector Andreyra found two nests in bushes in the forest undergrowth of Bugoma, with two eggs and one egg respectively.

*Aplopelia larvata larvata.*

RUFOUS-BREASTED FOREST-DOVE.

*Haplopelia larvata* Temm and Knip.

Sharpe's Hand List, Vol. I. p. 85.

*Aplopelia larvata* Temm and Knip.

Reichenow's Vögel Afrikas, Vol. I. p. 420.

*Aplopelia larvata larvata* Temm and Knip.

Sclater's Systema Avium Ethiop., Part I. p. 173.

*Description: Adult Male.* Front half of the head and upper throat white; cheeks and ear-coverts white, faintly tinted with vinous-ashy; hind part of the head and neck coppery-purple, now and then with green reflections, stronger on the lower part of the hind neck; interscapular regions slate colour, the edges of the feathers coppery, with green reflections; remainder of the upper parts brown-olive; fore neck and breast dull vinous, changing into dusky-brown on the sides of the body, and into rufous-cinnamon on the abdomen vent and under tail-coverts; neck with purple-metallic shades; quills and under wing-coverts greenish brown; two central tail-feathers olive-brown; next pair with grey shade at tip, remainder blackish-brown, with a broad apical dark grey band; iris, in male, dark crimson, eyelids dark carmine; bill black; feet unripe-plum colour. Length, 273-282 mm.

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In the *female*, iris crimson with inner rim of silvery-white, eyelids dark carmine; bill dull black; feet plum colour in front, leaden-grey behind. Length, 262-275 mm.; wing, 145-150 mm.

*Distribution.* Kenya.

*Recorded Localities.* Nairobi, Ngong, Eldoma Ravine, Marsabit. Mt. Kenya, Meju (Lönnerberg). Kyambu, Kakamega (van Someren).

*Notes.* The Rufous-breasted Forest-Dove is restricted to the primeval forests of the Colony, and, I believe, entirely to those above 5000 feet in altitude. It is plentiful between Nairobi and Ngong, and in Mau forest at the Eldama Ravine; but it is very far from easy to obtain, owing to the difficulty of seeing it in its gloomy surroundings; also, when it moves it is so quick, and such an expert at dodging, that it rarely affords more than a glimpse, and a snap-shot. Professor Lönnerberg experienced the same difficulty.

At the Eldoma Ravine some of my specimens were caught in nooses set at short intervals in a forest track that was swept clear of leaves, and then sprinkled with *matama* or *wimbi* as bait; this method is very effective with many other birds, but the traps should be visited every hour. Dr. van Someren in the *Ibis*, 1916, p. 213, writes: "They were nesting in March, and young birds in first plumage were taken in May."

## SCOLOPACIDÆ.

### *Capella gallinago gallinago.*

COMMON OR EUROPEAN SNIPE.

*Gallinago gallinago* Linn.

Sharpe's Hand List, Vol. I. p. 165.

Reichenow's Vögel Afrikas, Vol. I. p. 237.

*Capella gallinago gallinago* Linn.

Sclater's Systema Avium Ethiop., Part I. p. 128.

*Description: Male and Female.* General colour above black, with a broad line of sandy-buff along each side of the back; rump and upper tail-coverts tawny-rufous barred with dusky-black; wing-coverts blackish-brown, the marginal ones uniform, the median and greater series spotted with ashy-white at the tips; quills blackish, the first primary whitish on outer web, the secondaries conspicuously tipped with white; tail-feathers tawny-rufous, black at the base and tipped with white, before which is a wavy sub-terminal bar of dusky-black; *the outer feathers regularly barred with blackish*; crown of head sandy-buff along the centre, with a broad black band on each side, followed by an eyebrow of sandy colour, white above the lores, across which to the eye is a broad black streak; sides of face white; cheeks and chin white, the throat and chest sandy-brown mottled with blackish spots and bars; breast and abdomen pure

white; sides of body conspicuously barred with dusky-black; under tail-coverts rufescent and barred with black; *fourteen* tail-feathers; iris brown; bill dull grey, light brown, or ruddy brown with darker tip, lower mandible dull green, brownish-green, or yellowish-green; feet light greenish-yellow, green, or yellowish-green. Length, 262-292 mm.; wing, 135 mm.; bill, 67-74 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Kibero, Butiaba, Katwe, Entebbe. Lake Ruaketenge (Doggett). Naivasha (Gurney). Loita (Cosens). Nakuru (van Someren). Nairobi (Percival).

*Notes.* The Common Snipe of Europe visits the Colony and Uganda between October and March. Up to 1901 it had not been recorded from farther south than the White Nile, though no doubt it had been shot for the pot on many occasions, both in the Colony and Uganda. In that year Mr. G. F. Archer obtained it on Lake Albert, and subsequently in Toro. Still later Mr. Gurney obtained it at Naivasha, and it has since been found on Loita by Captain Cosens and at Nairobi by Mr. Percival and others. It is due, to some extent, to its having been overlooked, or mistaken for the more plentiful local, and resident bird (*C. nigripennis*), that it is rare in collections. It is, I believe, quite impossible to distinguish this bird from the local one when on the wing; both are identical in their habits, and their call is the same. I think it is possible that Dr. van Someren in his note in the *Ibis*, 1916, p. 202, on a single bird he

shot at Nakuru, is mistaken when he states: "These birds were frequently shot along with *G. nigripennis*. They were especially common in swamp-country." In my experience, the Great Snipe (*C. media*) is the only one that can be considered really common, and then only for short periods during the year.

*Capella media.*

GREAT OR SOLITARY SNIPE.

*Gallinago media* Latham.

Sharpe's Hand List, Vol. I. p. 165.

Reichenow's Vögel Afrikas, Vol. I. p. 235.

*Capella media* Lath.

Sclater's Systema Avium Ethiop., Part I. p. 128.

*Description. Male and Female.* General colour above black, striped and mottled with sandy-buff, the stripes on the sides of the back very broad; the upper surface also interspersed with buff spots; wing-coverts conspicuously tipped with white; primary-coverts and quills black, the former and the secondaries with white tips; rump and under tail-coverts sandy-buff, barred with dusky; *sixteen* tail-feathers, centre ones bright rufous with black bases and a narrow sub-terminal white tip, the white gradually increasing till the four outer ones on each side are white, except for a few spots towards their base; a dusky-coral streak; chin and centre of abdomen white; the sides of the face and neck, the fore neck and breast sandy-buff streaked with brown; the flanks and under tail-coverts also sandy-buff, but barred with



brown; axillaries and under wing-coverts barred with black and white; iris brown; bill ruddy-brown or greenish-brown, darker towards tips, base of lower mandible dull greenish-yellow; feet pale yellow or yellowish-green to greenish-grey. Male: Length, 293-302 mm.; wing, 135-145 mm. Female: Length, 287-305 mm.; bill, 62-68 mm. Weight (of heaviest bird)  $8\frac{1}{4}$  oz. (van Someren).

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Jipi, Witu, Machako's, Nairobi, Limuru, Naivasha, Londiani, Kisumu, Ndui, Entebbe, Busuju, Bukakata, Butiaba. Lake Ruaketenge (Doggett). Kikuyu (Granvik). Nakuru (van Someren).

*Notes.* The Great or Solitary Snipe, during its visit to the Colony and Uganda between September and May, is very widely distributed, but undoubtedly it is more plentiful in Kenya than Uganda. It is, furthermore, very much more plentiful when returning to its northern breeding grounds than on its arrival from them. In September it was common in the rice-fields and marshes bordering the ponds and small lakes at Jipi, near Lamu. In seventeen days thirty-three couples, as well as twenty-six couples of "Painters," were bagged, but towards the end of the month it had departed, and presumably gone on further south. It is uncertain and erratic in its movements; one year it will appear in large numbers in a particular marsh, the next year, in the same spot, and at the same time, and when the conditions are apparently similar in all respects, an odd bird only, or none at all, may be found. Observations covering a

period of many years lead me to the belief that it follows no particular route on its migration south, but that the majority return by the Rift Valley. At Nairobi, it arrives in late April, or early in May, and remains for a week or ten days, or even more, on most of the marshes. My latest date is June 1st; Dr. van Someren's latest is the 15th. In 1905, a year remarkable for the late departure of nearly all the northern migrants, this Snipe was unusually late, and several were shot on May 17th. On the 18th I assisted Colonel E. G. Harrison and Captain Mackay of the K.A.R. in bagging 14½ couples, and appended is a note made at the time: "Whole country under water; even the flat plain on the Ngong road just beyond the Military Lines is a snipe marsh. Harrison, Mackay, and self shot 14½ couples of *G. media* there this evening. When the bag was laid out, noticed most of the birds were puffy about the throat and part of a worm protruded from the gape of one. Remarked casually—'I suppose both of you believe the yarn that a snipe lives on suction, and that you eat its insides, politely called the "trail"?' They assented. Picked one up, squeezed its crop and throat, and to the remark 'What do you think of that?' out gushed a mass of worms, enough to fill three parts of a sherry glass. Both went home wiser men."

Other notes appear to indicate that the male birds precede the females by several days. When on its way north, it is always remarkably fat. At all times it is easy to shoot; it is heavy and slow on the wing compared with our Common Snipe, or the local bird (*C.*

*nigripennis*), rises with a snappy flick of the wings, does not twist and turn in the same manner, but flies low and direct, and rarely far before settling again, and I believe it never calls on rising. That it has a call, but a very un-snipe-like one, I am at present convinced, as the following notes will show—and I hope they will lead other observers to investigate and corroborate, or dispel this belief. “*April 30th, 1906.* During the last two days have constantly heard a curious deep ‘*hoo-hoo-ing*’ call in the marshy ground between the Secretariat and Railway Line. Went for a walk round this evening, in the belief that there might be an influx of Short-eared Owls (*A. h. helvola*) or perhaps a species of small Bittern. Twice heard the call close by, but found nothing.” “*May 1st.* At lunch time heard the *hoo-hoo* call in the hollow behind the house. This evening went for a stroll, and heard call coming from small patch of marsh about twenty yards square. Got within ten yards or so of the spot the call seemed to come from, when it stopped; went on and quartered the ground, but found nothing. Certainly not an Owl, or Bittern; not enough covert to hide either. Possibly a small Crake (*S. lugens*);<sup>1</sup> one or two seen lately. Or can it be a frog? If the latter, it is certainly a new one to me, as have never heard the call until three days ago.” “*May 2nd.* Coming back from dining out last night, heard the *hoo-hoo* call several times in the marsh below Secretariat.” “*May 3rd.* Went birds’-nesting near rifle-butts, whole place a marsh. Heard the mysterious call in several places, and three times located the spot within six feet before it stopped,

<sup>1</sup> Now *S. somereni*.

but could find nothing. The boy with me said it was a bird, not a frog. Could not believe him, and gave it up. Was returning by a native footpath when call began fifty yards ahead, and apparently on or quite close to the footpath. Went on and located it in a patch of trodden-down grass, where the natives, in order to avoid a soft, reeking, muddy depression, had walked around it in increasing circles until the grass was more or less laid flat within a space 20 yards long by about 12 wide. Told the boy to stand and watch while I carefully and very slowly stalked the spot. Call stopped when six feet away, had careful look round and went on, when the call began behind me, and in a direct line with the boy, who pointed at the spot I had just walked over. Decided to change tactics, and hurried back at a run, splashing through the mire, when to my astonishment a Great Snipe rose within three feet of me. Had no gun, unfortunately." "May 4th. No calling heard morning or afternoon below Secretariat. Went to Rifle-butt marsh in evening with a gun; heard no calling. Quartered the ground with two boys with long switches, but saw no snipe." The above suggest that the call was a Great Snipe's and that it may have been its love-call."

*Capella nigripennis.*

ETHIOPIAN SNIPE.

*Gallinago nigripennis* Bp.

Sharpe's Hand List, Vol. I. p. 165.

Reichenow's Vögel Afrikas, Vol. I. p. 165.

*Capella nigripennis* Bp.

Sclater's Systema Avium Ethiop., Part. I. p. 128.

*Description: Male and Female.* Closely resembling *C. media*, with *sixteen* tail-feathers, but darker and more richly coloured, the black having a velvety gloss, and the buff a richer tinge; the other distinguishing marks are the much narrower and less conspicuous tips to the wing-coverts; the inner secondaries (except the innermost elongated ones) are blackish with white tips, and no surface bars; the *three outer tail-feathers are white*, with clearly marked dusky spots, or bars, on the outer web; finally, the bill is much longer; iris brown; bill ochreous-green, dark greenish, blackish-brown, with base of lower mandible dark green, or greenish-grey; feet greenish-yellow, or greenish-grey. Length of male, 267–291 mm.; female, 285–305 mm.; wing, 129 mm.; bill, 68–78 mm.; Weight 4 oz.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Jipi, Witu, Nairobi, Mianzini, Lari, Naivasha, Il-polossat, Rumuruti, Eldoma Ravine, Uasingishu Plateau, Londiani, Entebbe, Butiaba, Bukakata, Katwe. Singo (Woosnam). Kikuyu (Hinde). Mau (9100 feet) (Cosens). Lake Ruaketenge (Doggett). Nakuru, Narasha (van Someren). Mt. Elgon (13,000 feet), Eldoret (Granvik).

*Notes.* The Ethiopian Snipe is a resident in the Colony, but its range is more restricted than the Great Snipe's. It is rarely found in any considerable numbers in one spot, is more scattered, and a single bird is often flushed from a narrow stream of clear running water, a ditch, or a small and isolated patch of marshy ground. It is mostly found at altitudes between 5500 to 9000 feet,

and upwards. Dr. Granvik obtained it at 13,000 feet on Mt. Elgon. At Jipi near Lamu, in September, a single bird, probably of this species, was flushed, shot at, and missed in a marsh where *C. media* was plentiful; it was the first one met with in the coast regions, but another was subsequently killed near Witu. It is, like all the Snipes, subject to local movements. It is much quicker on the wing than the Great Snipe, and in its zig-zag and ascending flight, its call and habits generally, is indistinguishable from our home bird (*C. g. gallinago*). Visiting sportsmen occasionally allege that it is not so quick, but the difference, if any, is about on a par with the claim of Irishmen that their Snipe is harder to hit than an English or Scottish bird. I think it is more probably a case of mistaken identity. Any difference there may be, and often is, in quickness in getting under way and in the zigzag flight of this bird, is probably due to a varying condition of physical energy influenced by the amount of food available, the force of the wind, temperature, and time of day; the two latter in particular. On the Uasingishu Plateau, on a cold morning in February, it can get under way as quickly as any home bird. It breeds in the marshes bordering Il-polossat, and no doubt in other places in the highlands between May and July. During a short tour in the Northern Masai Reserve, several birds were seen and heard "drumming" on June 15th, and again on the return journey on July 1st, but no nests were found. Two years later, my collector Baraka spent nearly a month there, between June 15th and July 10th, but also

failed to find a nest, although the birds were both plentiful and "drumming." He, however, brought back a young bird that was just able to fly, as evidence of its having been bred there.<sup>1</sup> In Uganda it ranges through the Protectorate, and possibly breeds in certain localities in Ankole, Toro, or Kigezi.

At Butiaba Mr. G. F. Archer obtained it in a marsh separated from the lake by a sandbank; in this particular marsh he also obtained, between November 15th and December 10th, the Great and Common Snipe (*C. media* and *gallinago*), the Jack Snipe (*L. minima*), and Painted Snipe (*R. benghalensis*), and one day he obtained three out of the five species, the Great, the Jack, and the Painted. But this has since been beaten at Nairobi by Colonel Meinertzhagen, who shot all three of the larger birds, as well as the Jack, in one day.

The eggs are pale greenish- or olive-buff, rather sparingly spotted and blotched with dark blackish-brown, pale brown, and underlying grey. The markings are larger and more frequent at the broad end. They measure 41-44 × 28-30 mm.

*Limnocryptes minima.*

JACK SNIPE.

*Limnocryptes gallinula* Linn.

Sharpe's Hand List, Vol. I. p. 166.

*Limnocryptes minima* Brünn.

Sclater's Systema Avium Ethiop., Part I. p. 129.

<sup>1</sup> Dr. van Someren in *Nov. Zool.* Vol. XXIX. 1922, p. 20, states: "I have found this species breeding at altitudes from 3,400 to 9,000 feet"; but he gives no dates.

*Description. Adult Male and Female.* General colour above black, with reflections of glossy green and purple, and a few rufous markings on the back, mostly in the form of streaks; the sides of the back ornamented with a longitudinal band of ochreous-buff from the sides of the mantle along the scapulars, a sandy-buff band, not so distinct, along the inner secondaries, being broken up by the black and rufous markings of the feathers; upper tail-coverts blackish, slightly freckled with rufous, with broad margins of ochreous-buff; wing-coverts blackish with pale rufescent margins; the greater coverts uniform dusky-brown, with pale edges; quills and primary-coverts dusky-brown; tail-feathers pointed, uniform dusky-brown with pale sandy-buff margins; crown of head and nape black, sparsely spotted with rufous, and bordered by a broad superciliary band of sandy-buff, the lores and feathers round the eye blackish; cheeks and ear-coverts dull white, spotted with black, and having a black line along the upper cheeks; chin and upper throat white; sides of neck and hind neck earthy-brown, slightly mottled with blackish, and separating the head from back; lower throat and fore neck pale rufous-brown, spotted and streaked with black, the sides of the throat and flanks being similarly marked; breast, abdomen, and under tail-coverts pure white, the latter with a few dusky streaks; under wing-coverts ashy-white, with dusky bars; axillaries pure white; iris brown; bill light greenish-brown, or fleshy-brown, or ruddy-brown with darker tip; feet light and washed-out greenish-grey, light dirty green, or light greenish-grey.



Length of male, 209–219 mm. ; of female, 207–216 mm. ; wing, 105–110 mm.

*Distribution.* Kenya ; Uganda.

*Recorded Localities.* Sio River (Bagnall). Butiaba (Archer). Nyeri (Boileau). Nairobi (Percival). Naivasha (Meinertzhagen). Nakuru (van Someren).

*Notes.* The Jack Snipe of Europe is a rare but regular visitor to the Colony and Uganda between October and March. It is not recorded by Professor Reichenow in his "Vögel Afrikas." The first intimation I received of its ranging so far south was from the late Major Charles Bagnall, who declared that he had shot it (in 1896) in a marsh near the mouth of the Sio River, but I confess to being sceptical at the time, in spite of his assurances that he knew the bird well, and had shot scores of them in Yorkshire. He was, no doubt, quite right. It was not, however, until 1901 that all doubt was set aside by Mr. G. F. Archer, who found it in considerable numbers in a small marsh at Butiaba. On December 6th he shot five, and his note reads as follows: "*Jack Snipe.* Comment needless. Besides these five specimens, one was lost and another missed." On the 7th, he shot two more and saw two or three others, and on the 10th, his last day in the marsh, he got two more. Of the ten specimens preserved, four were males and six females. He describes it as "just as sluggish and difficult to flush, and as easy to shoot as it is at home." It has since been obtained at Nyeri, Naivasha, and Nairobi; the latter is, up to the present, the "furtherest south" in its wanderings.

*Rostratula benghalensis.*

## PAINTED SNIPE.

*Rostratula capensis* Linn.

Sharpe's Hand List, Vol. I. p. 167.

*Rostratula benghalensis* Linn.

Reichenow's Vögel Afrikas, Vol. I. p. 237.

Sclater's Systema Avium Ethiop., Part I. p. 129.

*Description: Adult Male.* Crown and mantle dark ashy-grey, slightly vermiculated with darker; a median line of buff along the crown bordered by a shade of blackish; wing-coverts bronzy-yellow with incomplete, black-edged spots of paler yellow; the scapulars and inner secondaries ashy, mottled with transverse spots of bronzy-green bordered by white and a longitudinal line of buffy-yellow; quills pale ashy-grey, with conspicuous spots of buff; inner primaries and secondaries barred and spotted with black and white; rump, upper tail-coverts, and tail ashy, finely barred with black and spotted with buff; round the eye and extending back over the ear-coverts a circle of white, below which is a darker band; chin whitish, ashy-brown on the sides of the face and neck, and edging in an ill-defined cross band of black across the upper breast; rest of lower surface white, except for a mottled black patch on either side of the lower breast; iris hazel; bill greenish-brown, or ruddy brown with darker tip; feet green or bright green. Length, 247 mm.; wing, 122 mm.

*Adult Female.* Differs from the male in being much more richly coloured; the back and scapulars are a

rich bronzy-brown with a metallic-green gloss, and a few transverse bars greenish-black; a longitudinal streak of buff along the inside of the scapulars; wing-coverts bronzy-metallic-green, transversely barred with blue-green; wing quills and tail as in the male; lores, neck all round, and fore neck rich chestnut, fading on the chin and throat, bordered below by a broad collar of black across the upper breast. Length, 241 mm.; wing, 139 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Jipi, Dagoretti, Kisumu, Mengo, Butiaba. Upper Tana (Harrison). Machako's (Hinde) Nairobi, Nakuru, Kyambu (van Someren).

*Notes.* The Painted Snipe is a resident with a wide range in both the Colony and Uganda, but it is distinctly a local bird, and is subject to irregular movements. In September it was very plentiful in the marshes and rice-fields bordering the small lake and ponds at Jipi near Lamu; in a seventeen days' shooting and collecting trip, twenty-six couples were bagged. Elsewhere only odd birds have been met with, here and there. Mr. S. L. Hinde records it from Kikuyu in July, and from Machakos in April, and in the *Ibis*, 1898, p. 586, states: "A rare visitor. Among a hundred and odd brace of snipe shot, there was only one and a half brace of the Painted Snipe."

In Uganda Mr. G. F. Archer found it fairly plentiful in a marsh at Butiaba between November 10th and December 6th, but none was seen later. It lies very close, often rising within a few feet, is slow and almost

owl-like in its flight, rarely goes far before settling again, affords very poor sport, and is scarcely worth powder and shot as a table bird. It is chiefly remarkable for the female being much more richly coloured than its mate. At Jipi it was breeding in September. On the 12th a nest was found in a marsh, on a small slightly-raised mound, just above water, and well hidden under overhanging grass. It was simply a small collection of dry grass, and contained four eggs. It would not have been seen if the bird had not risen almost at my feet. Another nest, found on the 16th, was on the side of a large grass-covered ant-heap, standing in water four feet deep, in the middle of a small pond. It also contained four eggs, and the male bird was sitting on them, and only left when I grasped the tuft of grass that hid it, to help me to climb out of the water and hide during a duck drive. The eggs are pointed oval, fairly glossy and a pale yellowish-buff, boldly blotched and streaked with very deep brown or black, and some inconspicuous underlying pale purple. The markings generally run into each other, and cover about half the surface of the shell. They measure 32-38 × 22-26 mm.

## OTIDIDÆ.

*Neotis cafra cafra.*

STANLEY'S BUSTARD.

*Neotis cafra* Licht.

Sharpe's Hand List, Vol. I. p. 176.

*Otis cafra* Licht.

Reichenow's Vögel Afrikas, Vol. I. p. 244.

*Neotis cafra cafra* Licht.

Sclater's Systema Avium Ethiop., Part I., 113.

*Description : Adult Male.* General colour above dark grey, finely waved and streaked with sandy and black vermiculations; tail-feathers barred with black and white, the two central ones having three distinct bars of black, and one broad one of white; crown of head black with a white mesial band, flanked on each side by a broad whitish eyebrow; nape greyish-white; hind neck rufous, this colour extending on to the mantle; lesser wing-coverts like the back, but browner and less distinctly vermiculated; median coverts black, with a good deal of white at the base, and a small white tip; greater coverts white, with black bars near the tip; lores, sides of face, and ear-coverts white; cheeks white freckled with black vermiculations; throat white, fore neck and chest light blue-grey bordered on the sides

by the rufous of the hind neck; remainder of under surface of body white.

In two breeding males, shot on February 8th, the irides were brown; bill dusky-lead colour, edges and lower mandible white; feet white. Length, 1181 and 1036 mm.; wing, 598 mm.; weight, 16 lb. and 15 lb. respectively.

In an adult male, shot in the same spot (Gilgil) on April 21st, the irides were pale brown (hazel); bill dusky-black, lower mandible white-horn; feet white. Length, 1067 mm.; wing, 592 mm. Weight, 11½ lb.

*Adult Female.* Similar to the male, but much smaller, and with an ashy band down the centre of the crown, which is finely vermiculated with blackish; the lower throat more coarsely vermiculated. Total length, 840 mm.; wing, 476 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Naivasha, Gilgil, Rangatta Elgek, Mbaruk River, Londiani-Ravine Road, Nakuru, Upper Nyando Valley. Nandi (Hobley). Amala River, S. Uaso Nyiro (Cosens). Kedong Valley (Loveridge). Burumbi, in S. Uganda (Doggett). Lake Albert (Emin).

*Notes.* The Lesser Bustard appears to be much scarcer, and much more a local bird than its larger relative (*C. k. struthinunculus*), from which it is further distinguishable at a distance by its paler colouring, the much larger amount of white on the wings, and plumper appearance. With the exception of one seen in the act of displaying, in the Upper Nyando Valley (Kedowa), and another near Londiani, all those observed by myself

were in the Rift Valley between Longonot and Menengai. Between Nimuli and Gondokoro several large Bustards with rufous necks were seen, and were believed to be referable to this species. Between Menengai and the shore of Lake Nakuru, after a recent grass fire, at least fifty of these fine birds were concentrated, together with the larger bird, and also black-stomached Floricans, Cranes, and Herons. With glasses, there could be no mistake in identifying each species, as every bird stood out very prominently in the bright early morning sunlight, and against the dull black and upward slope of the background. No doubt that burnt area, freely strewn with dead and dying animals of all kind, whether flying grasshoppers or crawling beetles, and even small mammals and reptiles, had attracted this bird and its relatives from many miles around. In February, a splendid cock bird was shot while in the act of displaying—a most interesting and remarkable spectacle when seen through a telescope and only a few hundred yards away. He was puffed out like a proud turkey, but more so, and appeared to be quite white as he strutted about and twisted round and round, first one way and then another, within a small area barely twenty feet square. From first to last there was no sign of a female, nor of eggs, although every foot of ground within a radius of a hundred yards of the spot was traversed by a dozen men in line and close formation; she had probably been quite near by in the grass, but had sneaked away unobserved. Another cock bird was killed in the same locality in April; both had the skin of the neck very much swollen with a thick,

slimy mucous, and the breeding organs were very much enlarged. The bird seen by Mr. Hobley in Nandi was also displaying; that was in March. It may therefore be inferred that the breeding season is between March and May. It probably lays two eggs, as in South Africa, "oval and pale brown; washed rather than blotched, with a slightly darker shade of the same colour, and measure 74 × 53 mm." (Sclater).

*Eupodotis canicollis canicollis.*

WHITE-BELLIED FLORICAN.

*Trachelotis canicollis* Reichen.

Sharpe's Hand List, Vol. I. p. 175.

*Otis canicollis* Reichen.

Reichenow's Vögel Afrikas, Vol. I. p. 219.

*Eupodotis canicollis canicollis* Reichen.

Sclater's Systema Avium Ethiop., Part I. p. 114.

*Description: Adult Male.* General colour above sandy-buff, minutely freckled with blackish wavy lines or irrorations and irregular cross-bars and blotches of brown; primary coverts slaty-blue with dusky and blackish ends; tail tawny-rufous at base, black at tip, the two centre feathers sandy-buff, freckled with blackish lines; crown of head slaty-blue; forehead black; neck and chest slaty-blue; in the centre of throat a large black patch; lores and broad eyebrow, cheeks and chin white; below the eye a black streak; a black streak encircles the crown and occiput, and this is connected with the black patch on the throat;



under surface of body white; the long under tail-covert sandy-buff, barred with blackish and minutely freckled with sandy-buff; iris brown, brownish-grey, brown with outer rim of white; bill dusky brown horn towards tip, basal half from in front of nostrils dull pink, fading into white on lower mandible; feet yellowish-white to dusky lemon-yellow.

*Female.* The female is similar to the male, but the crown is sandy-buff, freckled with brown, the forehead dark brown, the black throat patch much less distinct, with white tips in the feathers, and the black streak under the eye freckled with buff; the lower throat, front of the neck, and breast sandy-buff, minutely freckled with blackish-brown. Total length, 535-584 mm.; wing, 317 mm. Weight of male,  $2\frac{1}{4}$  to  $2\frac{1}{2}$  lb. Weight of female,  $2\frac{1}{2}$  lb. (Lowe).

*Distribution.* Kenya.

*Recorded Localities.* Merereni, Maji Chumvi, Teita, Serengeti and Rombo plains, Simba, Makindu, Machakos, Lukenia, Nairobi. Lemek Valley, Amala River, E. of Leganisho (Cosens). Tsavo River (Praed). Lower Tana (Fischer).

*Notes.* The White-bellied Florican ranges from the coast to Kilimanjaro and northward to the Athi plains. Between the latter and Baringo it was never met with. It is, or was, particularly plentiful in the neighbourhood of Machakos. In the early part of 1889 it was possible to make certain of getting a brace or more of this bird during an evening prowl through the scattered acacia trees, which then covered the plain south of the station,

and between Machakos Hill and the Mua Hills. At the foot of the former, the native cultivations lying fallow were a great attraction. In September it was congregated in great numbers between Lanjoro and Lukenia, and its call could be heard in all directions. Out of a single small patch of grass, one of several that had escaped a recent fire, seven rose at once, and went off shrieking out their call of alarm or irritation. It lies much closer than its black-stomached relative, and is easier to approach; also on being flushed it does not go so far before settling again, and it is, in consequence, easier to mark down with accuracy—an important point. It is a very noisy bird, and its call is often heard throughout the day in dull weather; it is particularly vociferous after a shower of rain.

Its call, if it is possible to represent it in words, sounds to me like "ice-mophokh," with a guttural roll to the last syllable. The stomach and crop of one contained many caterpillars and beetles, and also a mass of grass seeds. During the heat of the day it has been seen standing in the shade of a bush, with its throat puffed out and pulsating like a toad's. It was a White-bellied Florican that was responsible for a surprise that will always remain vividly imprinted on my memory; it was while stalking one, spotted in the act of crouching in a patch of grass, that I walked up to within fifteen yards of a bush, when out scrambled, in a cloud of dust, two splendid full-maned lions. Dr. J. T. W. Johnson, who knew the bird well, and had shot several near Nairobi, informed me that he once

saw one fly up and settle on the lower branch of a tree.

It breeds between February and May, and lays two eggs on the bare ground. The eggs are very round, greenish-stone-grey, with irregularly shaped spots, and blotches of brown, and with underlying markings of purple-grey and pale lavender. They measure  $58 \times 52.5$  mm.

*Eupodotis canicollis somaliensis.*

SOMALI WHITE-BELLIED FLORICAN.

*Trachilotis canicollis* Reichen.

Sharpe's Hand List, Vol. I. p. 175.

*Otis canicollis canicollis* Reichen.

Reichenow's Vögel Afrikas, Vol. I. p. 250, and  
Vol. III. p. 802.

Lönnerberg, Swedish Zoological Expedition, 1910,  
*Birds*, p. 39.

*Eupodotis canicollis somaliensis* Erl.

Sclater's Systema Avium Ethiop., Part I. p. 114.

*Description.* Similar to *E. canicollis canicollis*, but much paler and more sandy-buff above, with brown, in place of black, markings, and with the small wing-coverts much more rufous; iris brown with outer rim of white; bill brown, tip black, and base pinkish; lower mandible pinkish, fading into white at the base; feet dull faded lemon-yellow. Wing, 314 mm.

*Distribution.* Kenya.

*Recorded Localities.* Mugatan, Suk Country. N. Uaso Nyiro, Luazomela River (Lönnerberg).





XI TISSOTIS MELANOCASTER

*Notes.* This is a well-founded race, and easily distinguishable from the birds of the Athi plains, and further south. In habits it would appear to be similar in all respects to its near relative (*E. c. canicollis*).

*Lissotis melanogaster.*

THE BLACK-BELLIED FLORICAN.

Plate XI.<sup>1</sup>

*Lissotis melanogaster* Rüpp.

Sharpe's Hand List, Vol. I. p. 175.

Sclater's Systema Avium Ethiop., Part I. p. 115.

*Otis melanogaster* Rüpp.

Reichenow's Vögel Afrikas, Vol. I. p. 256.

*Description: Adult Male.* General colour dark brown vermiculated with blackish, and having large median ovate and arrow-head streaks of black; lower back and rump nearly uniform brown with a few frecklings of sandy-buff; *marginal and median wing-coverts white; greater coverts white*, regularly barred with three bands of black; primary coverts black tipped with white; first primary black, *the remainder almost entirely white* with black tips; upper tail-coverts and centre tail-feathers ashy-brown, the remainder tawny or blackish-brown thickly freckled and crossed by five black bands,

<sup>1</sup> The bird figured in the plate was obtained by Lord Lovat in Southern Abyssinia, and was regarded by Mr. Ogilvie-Grant as distinct from *L. melanogaster* on account of the much wider white patch on the wings, than birds from Kenya and Uganda, but some birds from Nyassaland have a similar wide patch, and it is obviously only a form of the typical race.

the outer feather almost entirely black; crown of head and hind neck sandy-buff minutely freckled with black and some tiny spots of lighter buff; lores and eyebrows dark slaty-grey continued in a black line, skirting the sides of the head and uniting on the nape; feathers below the eye, cheeks, chin, and upper throat hoary grey, shading into black on the lower throat, and continued in a line down the centre of the neck; fore neck, chest, breast, and under surface of body black; thighs black with white ring just above the bare portion of the tibia; under tail-coverts sandy-buff; iris brownish-yellow; bill dark brown; lower mandible dull white; feet white. Total length, 602-638 mm.; wing, 330 mm. Weight, 2 lb. 3-10 oz.

*Female.* Similar to the male on the upper surface, but more profusely spotted with arrow-head spots of black brought into strong relief by a creamy-white border; tail sandy-buff mottled and barred with blackish; head blackish spotted with sandy-buff; eyebrow, sides of face, and ear-coverts sandy-buff with no black on the face and sides of crown; chin and upper throat white; lower throat, fore neck, and chest sandy-buff minutely flecked or barred with blackish; breast sandy-buff with lines of spear-head markings of black, remainder of under surface white tinged with sandy-buff; iris brown; eyelid pale lemon; bill blackish-brown; lower mandible pale green; feet yellowish-white. Total length, 610-638 mm.; wing, 330 mm. Weight, 2 lb. 6-9 oz.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Samburu, Ndii, Serengeti, Rombo Plains, Machakos, Makindi, Gilgil, Elmenteita, Molo River, Ravine, Uasingishu Plateau, Kisumu, Mumias, Entebbe, Bwiro, Bulemezi, Ankole, Toro, and Tonia on Lake Albert. Rombo Plains (Abbott). Useri River (Hunter). Athi and Thika (Gurney). Baringo and Mugatan (Archer). Fort Hall, Kyambu (van Someren).

*Notes.* The Black-bellied Florican ranges throughout the greater part of the Colony and Uganda, but its distribution appears to be entirely dependent on open country that may be termed "grazing grounds," whether for game or cattle. It is, or was, more abundant between Lake Nakuru and Molo River than anywhere else I ever met with it. It is rather a shy bird, and is not easy to approach within gun-shot range, except when the grass is fairly long; and when flushed it will often go so far away before alighting again that it is very difficult to mark down. It is, however, easily killed, and has frequently been bagged with No. 8 shot. It is, like all the Bustards, subject to local migrations, and these to a large extent appear to be influenced by grass fires; such movements occasionally may be observed by day and at any hour. One such occurred near Nakuru at 7 a.m., when a hundred or more, together with many of the two larger birds, crossed the road half a mile ahead of me, all flying in the same direction.

Its call is harsh and strident, but it is not nearly so noisy a bird as its near relative (*E. c. erlangeri*), and it is rarely heard except in the early morning and



evening, or after a shower of rain. It is generally found singly or in pairs, and on the wing is easily distinguishable from any other Floricans that may be found in the same locality by the very conspicuous white markings on the wings. When descending from a height it frequently raises its wings well above the back, and gently and gracefully drops to the ground. Its food consists mainly of insects, grasshoppers, beetles, etc. It is one of the best of the game birds for the table, but it is at least possible that it would be regarded with less favour were it generally known that a very large proportion of them are infested by a species of tape-worm. With a bird so widely distributed the breeding season must vary considerably. In the Colony an egg was taken on the Uasingishu Plateau on February 20th, and near Mugatan eggs were taken by Mr. G. F. Archer in April and June. These dates suggest that altitude—a difference of some 4000 feet—is a factor of more than passing importance. It appears to lay one egg only. It is pale olive-brown, blotched and marbled with reddish-brown, and with underlying markings of grey, and measures  $63 \times 52$  mm.

*Lissotis hartlaubi.*

HARTLAUB'S FLORICAN.

*Lissotis hartlaubi* Heugl.

Sharpe's Hand List, Vol. I. p. 175.

Sclater's Systema Avium Ethiop., Part I. p. 115.

*Otis hartlaubi* Heugl.

Reichenow's Vögel Afrikas, Vol. I. p. 259.

*Description: Adult Male.* Similar to *L. melanogaster*, but distinguished by having the *lower back, rump, upper and under tail-coverts, as well as the tail, black*, the upper parts much darker and with conspicuous cream and buff V-shaped marks near the tip of the feathers: "iris yellow, bill light horn, culmen black; legs and toes cream-colour. Total length, 622 mm.; wing, 306 mm." (C. Grant).

In the female the tail is sandy-buff, strongly barred and vermiculated with black, each feather being tipped with a large buff spot.

*Distribution.* Kenya Colony; Uganda.

*Recorded Localities.* Kipini, Lamu (Fischer). Kilimanjaro (Hunter and Kenrick). Kedong Valley (Woodsnam and Loveridge). Bokoro, east of Mt. Loloro (Cosens).

*Notes.* Hartlaub's Florican is a bird whose distribution, so far as it is known at present, appears to be mainly governed by altitude. It has not been recorded from the highlands, excepting the lower Kedong Valley, but is found in the northern districts of the Colony and Uganda, follows the coast line southwards, turns inland to Kilimanjaro, and then northward to the Kedong Valley, all localities under or about 5000 feet. Captain G. S. Cosens noted it as "common" on the plain near Bokoro.

*Lophotis ruficrista gindiana.*

## THE RUFOUS-CRESTED FLORICAN.

*Lophotis gindiana* Oust.

Sharpe's Hand List, Vol. I. p. 174.

*Otis gindiana* Oust.

Reichenow's Vögel Afrikas, Vol. I. p. 253.

*Lophotis ruficrista gindiana* Oust.

Selater's Systema Avium Ethiop., Part I. p. 115.

*Description: Male.* General colour above ash-grey mottled and vermiculated with black, the feathers centred with spear-shaped markings of sandy-buff; crown of head light slaty-blue, *with crest on the nape of vinous isabelline*; eyebrows, sides of face, and throat uniform isabelline with slight vinous tint; throat with a medium band of black; rest of under parts black; iris white; bill dusky on upper mandible, pale brown on the lower; feet white. Total length, 495-508 mm.; wing, 246-266 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Taru Wilderness, Tsavo, Makindu Moyale, Turkwel River. Useri River (Hunter). N. Uaso Nyiro (Lönnerberg). Mugatan, Suk country (Archer). Lake Rudolph (Percival).

*Notes.* This small Florican with black stomach and rufous crest on the nape is essentially a resident of the bush-veldt. It is not often represented in collections, but this is not so much due to its scarcity, as to its being most frequently met with when still-hunting after big-game, Lesser Kudu, Gerenuk, and such-like

lovers of dry, arid country, and when carrying a rifle and not a shot-gun. It is generally flushed in small open spaces, where grass is scanty, and surrounded by bush sufficiently tall to render marking down very difficult and often impossible. It is remarkable for the silent way in which it rises, and its quickness in getting under way and vanishing over the bush-tops. Without exception, all those I have met with were single birds, and it was never heard calling. It breeds between April and June, and lays two eggs on the bare ground. Mr. Archer obtained three clutches of two, and a single egg near Mugatan, in the Baringo district. The eggs are stone-grey, spotted with brown, confluent in places, with underlying markings of pale mauve and grey. They measure 52-57 × 42-43 mm.

*Choriotis kori struthiunculus.*

THE NORTHERN KORI BUSTARD.

*Eupodotis kori* Burchell.

Sharpe's Hand List, Vol. I. p. 176.

*Otis kori* Burch.

Reichenow's Vögel Afrikas, Vol. I. p. 242.

*Otis kori struthiunculus* O. Neumann.

Neumann Journal Ornith., 1907, p. 306.

*Choriotis struthiunculus* O. Neumann.

Sclater's Systema Avium Ethiop., Part I. p. 112.

*Description: Adult Male.* General colour above ashy-grey, pale on the wings, and all profusely mottled with blackish vermiculations; the wings with large

black blotches; quills black; head and neck grey barred with black; top of head black with greyish band down the centre, and much crested; lores and superciliary stripe white; breast and abdomen white; a half-collar of black between the grey of the neck and the white chest; iris yellowish-hazel; bill blackish-brown, lower mandible dull white; feet greenish-white. Total length, 1220–1260 mm.; wing, 740–780 mm. Weight, 30 lb.

*Adult Female.* Similar to the male, but much smaller. Total length, 1050 mm. Weight, 11 lb.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Serengeti and Rombo Plains, Makindu, Simba, Kapiti and Athi Plains, Kedong Valley, Naivasha, Gilgil, Elmenteita, Nakuru Plains, Molo River, Baringo, Laikipia, Ankole. Rudolph (A. Neumann). Useri and Tana Rivers (Hunter). Tsavo (Praed). Useri River (Abbott). Loita, Lemek Valley, Amala River (Cosens). Luazomela and Itiolu Rivers, Lekinndu River, N. Uaso Nyiro (Lönnerberg).

*Notes.* This grand game bird is mostly confined to the vast open grazing grounds of the Rift Valley, and adjoining plateaux. It was also seen and shot by Sir Robert Harvey and Mr. H. C. V. Hunter in open country on the Lower Tana River, about 120 miles from the mouth; and that point is perhaps about the most eastern limit of its range. To the west it would appear to be limited to some extent by altitudes not exceeding 7000 to 7500 feet, as it is, I believe, not found on the Uasingishu plateau. At Rusasa in Ankole, a large

bird was seen in some open scrub by Dr. Dobell, who reported on his return to camp that he believed he had seen an Emu! As he had noted the prominent crest, and the very characteristic backward and forward sway of its neck as it walked, I believe it may have been this Bustard. It favours well-cropped grazing grounds, and dry areas where the grass is scanty and the ground freely sprinkled with stones; it has little use for eighteen-inch grass that proves so attractive to its smaller relatives, the Floricans. Like so many other resident birds, it is subject to local migrations, and these are governed by food supplies, or at least by facilities for obtaining them. For instance, two days after a grass fire had swept over the whole area between Lake Nakuru and Menengai Hill over fifty of these birds, together with a similar number of *Neotis c. cafra*, scores of Florican (*L. melanogaster*), and hundreds of straw-crested Cranes, Sacred Ibis, Black-headed and Buff-backed Herons, were seen scattered about, and quartering the ground early one morning in September. They all stood out very prominently against the black background, and presented a very remarkable picture of bird life. They were, one and all, no doubt, feeding on dead and dying grasshoppers, beetles, and other creeping animals. A splendid cock bird, shot at Nainvasha, had the steel and rolled-brass bases of five Snider cartridge cases in its gizzard. Professor Neumann's name would appear to be a particularly apt one!

As a rule, it is found singly or in pairs, and occasionally three or four together—possibly family parties.

On two occasions, two adult cock birds were seen con-sorting together. In appearance it lacks the usual plump smartness of the other game birds, due partly to its dull colouring and to its long, slim body with heavy drooping tail. A very marked characteristic is the backward and forward sway of the head and neck when walking. Except in open bush country, it is almost impossible to approach it within shot-gun range; it is mostly killed with a rifle, and as it is generally on the move when approached within reasonable range, it is none too easy to hit. One day near Enjempas a magnificent pair were stalked and killed with a shot-gun and No. 2 shot. A young bird is quite good to eat; but an old bird is fusty and most unpalatable. The weight of this bird is a subject of considerable interest, much dispute, and, I believe, not a few tall stories. I have weighed many of both sexes, but in no instance did a cock bird exceed 30 lb. and a hen 11 lb. Estimates by Europeans of 35 lb. to 40 lb. or more are not infrequent, but, I believe, worthless. Anyone can prove this by holding up with one hand a freshly killed cock bird by the legs, with bill just off the ground, and with drooping wings; he will find it extremely awkward to lift, and will probably think it weighs anything from 35 to 50 lb. Now let it be tied up in a neat bundle, with its head tucked under a closed wing; the difference on lifting it up is astonishing, and the scales will confirm it.

No mention has been made, so far as I am aware, of the Gom Paauw of South Africa "displaying," and I

never witnessed it in this bird in the Colony, although on very many occasions pairs must have been seen during the breeding season. But Sir Geoffrey Archer was more fortunate in Somaliland, and he describes it as follows: "Throwing head and neck well back, and with tail projected fan-wise over the back, like a turkey, it presents an astonishing sight, as with slow and measured tread it advances upon the female, side-stepping, and pirouetting in the most approved style; and then, as the culminating mark of its devotion, and presumably to her gratification, turning inside out in a process difficult to follow."

The late Mr. Arthur Neumann, when in the Rudolph district, and in a locality where there were neither trees nor bushes, observed the Rosy Bee-eater (*M. n. nubicus*) resting on the back of this Bustard. A young bird about three weeks old was obtained near Il-polossat on August 3rd, and a large marbled olive-green and brown egg, believed to be this bird's, was found floating in Lake Hannington in July by Dr. R. Drake-Brochman's egg-collector. Mr. A. B. Percival also found two eggs somewhere on Laikipia, which he believed, from their large size, to be this bird's, but he was unable to remember the date. It is hoped that the breeding season of such a fine game bird will soon be definitely known, and that a close season will be declared covering that period. Moreover, as it is a good friend to the farmer, all landowners should afford it further protection by strictly limiting the number to be killed on their property. From the evidence of the young bird



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killed on Laikipia it breeds between June and August. Many pairs in fine fresh plumage have been noted, from time to time, between January and April between Athi river and Kapiti stations, and particularly near the Stony Athi.

Two eggs are laid on the bare ground. They are "in ground colour pale greenish-brown, uniformly streaked and mottled over the entire surface with deeper shades of brown, and measure  $78 \times 61$  mm." (Archer).

## ANATIDÆ.

### *Plectropterus gambensis gambensis.*

#### SPUR-WINGED GOOSE.

*Plectropterus gambensis* Linn.

Sharpe's Hand List, Vol. I. p. 208.

Reichenow's Vögel Afrikas, Vol. I. p. 134.

*Plectropterus gambensis gambensis* Linn.

Sclater's Systema Avium Ethiop., Part I. p. 45.

*Description.* Upper part black shot with bronze and green; wings mottled with white; lower parts white with patches of black behind the thighs; the front of the head is bare, granulated, and reddish; this is succeeded by a white patch which does not extend to the top of the head, but occupies the chin and part of the front of the throat; wings armed with a strong powerful spur; iris dull yellow, bill, base, and naked part of face dull pinky-red; feet pinkish-white. Total length, 1000 mm.; wing, 450-500 mm.

*Female.* Similar to the male, but smaller, and the naked parts of the face less extended.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Jipi near Lamu, Naivasha, Elmenteita, Najuru, Menengai Swamp, Port Victoria, Yala and Nzoia Rivers, Dolwe and Bugaya Islands, Lake Kyoga, Entebbe. Athi River (Gurney). Kasaka,

Jinja (van Someren). Lake Wamala (Archer). Kagio, Punda Milia, Ruiru (Lönningberg).

*Notes.* The Spur-winged Goose is widely distributed throughout the Colony and Uganda; it is much the largest of the family, and is a resident, but subject to local movements. In the coast regions some were seen and several obtained on the lakes at Jipi, near Lamu, in September. In the Rift Valley it used to be plentiful on all the lakes and the adjacent grazing grounds. It is this Goose, when seen grazing or resting at long distances from the nearest water, that has frequently led people into the belief that they have seen wild Turkeys. To some extent the Ground Hornbill shares the illusion. On Lake Victoria it frequents the quiet, secluded backwaters of the large bays, and is either resting on the water or standing on the small floating islets of mud and lily-roots, or on short grassy sudd. In such places its long neck, and the swan-like way it carries it, has led people to assert that they have seen black Swans. It is generally met with in small lots of three or four together, and occasionally a single bird may be seen associating with Egyptian Geese. It has frequently been observed sitting on trees. Various grasses and their seeds appear to be its principal food, but in Uganda the small green buds of the water-lily are much favoured, and it freely visits the natives' sweet-potato plots, near the lake shore. It does not, I believe, actually dig up the potatoes, but only takes the small ones discarded and left on the ground by the owners. It is not, as a rule, an easy

bird to approach within shot-gun range, and most of those killed are either shot from a canoe, or from a "butt" or other screen by gunners lying in wait for ducks. As a table bird, it is scarcely worth a charge of shot, but it is very good for soup, or the stock-pot. In Uganda, young birds about a week old were found in a large swamp near Sango Bay, in early August, and Dr. V. G. van Someren states in the *Ibis* for April 1916, p. 197: "These birds were found breeding in a swamp at Lake Nakuru in September." Eggs from South Africa are described as "resembling ivory in texture and creamy-whiteness. Axis 2".9 (*i.e.* 83 mm.), diam. 2".6 (*i.e.* 66 mm.)"; and no doubt our bird lays very similar eggs.

*Nettapus auritus.*

DWARF GOOSE.

*Nettopus auritus* (Bodd).

Sharpe's Hand List, Vol. I. p. 209.

*Nettapus auritus* Bodd.

Reichenow's Vögel Afrikas, Vol. I. p. 127.

Slater's Systema Avium Ethiop., Part. I. p. 45.

*Description: Adult Male.* Upper parts shining black-green, with a longitudinal white stripe along the wing; under parts white; chest, flanks, and sides rufous, the first transversely marked with narrow black bars; front of head, cheeks, and throat white; top of head shining black-green; on each side of the neck a patch of dead green; iris brown; bill bright orange-

yellow, tip black; feet black. Total length, 324–333 mm.; wing, 152 mm.

*The female* has no green patch on the side of the neck, and the bill is much darker, and more olive.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* M'tangani, Jipi, Witu, Dokola, Matunda, Entebbe, Atura. Buddu, Buvuma Island, and Kibanga (van Someren).

*Notes.* This beautiful little Dwarf Goose, though widely distributed in the Colony and Uganda, is distinctly local. It is used to be very plentiful in the Witu District and on the mainland near Lamu. After leaving the coast, a long break occurs, and, so far as I am aware, it is not found in the Rift Valley, nor does it appear again until Lake Victoria is reached. It is there found in most of the shallow bays, sufficiently sheltered and quiet to allow Water-lilies, various aquatic grasses, and the Water-lettuce (*Pistia strateotes*) to accumulate. Further north it is found in the Teso and Lango districts. Curious to relate, it is very rare on Lake Kwania, and yet, perhaps, there are few sheets of water that appear to be more suitable to its habits. On the coast, in 1885, the rains were quite abnormal, and in the Witu district, and on the mainland near Lamu, every depression was converted into a shallow pond. The rains started at the end of March, and in August and September these ponds were not only covered with Water-lilies, but were full of small fish, a species of perch and the remarkable Lung fish (*Protopterus aethiopicus*). In the vicinity of M'tangani,

a slave village on the M'konumbi creek, this tiny goose was very plentiful in small family parties of three to eight, on nearly every pond, during August. In September and October of the same year it was equally plentiful at Jipi. Here there was one pond, almost a lake of open water, as well as several lily-covered ponds, but this bird invariably frequented the latter. In the quiet backwaters and lily-fringed bays of Lake Victoria it used to be very plentiful near Entebbe, but as it scarcely has an equal as a table delicacy, it was ruthlessly shot at all seasons of the year, until sleeping sickness and drastic preventative measures automatically placed it on the protected list. Unless it has been shot at and harassed, it is very tame and confident, and is quite easy to approach in a canoe, or by wading, but it soon learns what a gun is, and becomes so wild as to be unapproachable. It is very smart and active on the wing, springs straight off the water like a teal, and gets well under way at once. Unless it is killed outright, or very badly wounded, nine out of ten will escape by diving. A winged bird will dive and remain under water, with only its bill exposed and protruding between the Water-lily leaves. Swahilis and Baganda assert that it clings on to *majani* (anything green, whether grass, lily-stems, or rushes), and dies under water rather than come to the surface; but this is, of course, incorrect. As a matter of fact, it lies just under the surface, with wings partly extended, and its bill, up to the nostrils only, above the surface. Whilst wading in the ponds near Lamu, I have several

times seen a wounded bird do this, and more than once have caught one by the head. If, however, there is a ripple on the water, time spent in looking for a bird that has dived is wasted. At the coast it breeds in May and June, and in Uganda in January, July, and October. At Entebbe, two nests were found, one on July 10th, the other on October 13th. Both were in large holes in trees, one about thirty feet, the other sixty feet from the ground. The first one contained one egg, and after a lapse of five days contained three only, but as the female was on the nest, and some small boys were intently watching me, it was not considered safe to leave them. The second nest contained nine eggs, much incubated. It was in a much more difficult position, at the end of a dead branch.

It took my men six hours to get at it, and then only with the aid of a ladder, rope, and finally a hatchet. During the course of the operations, both birds left and re-entered the hole several times. The nest, probably an old one of a Purple Starling (*Lamprocolius glaucovirens*), was a mass of dry twigs, a few bits of green moss, and a quantity of down of the parent bird.

On February 2nd another nest was found; it was at arm's length inside a hole, and seven feet from the ground, in the face of the iron-stone cliff just below the Victoria Hotel, and within a few hundred yards of the tree from which the nine eggs were taken the previous year. The following notes, taken at the time, may be of interest: "*January 26th.* A pair of *Nettapus* seen on the water this evening, in close vicinity of last year's

nest—probably the same pair. Just before sun-down they flew to and fro over the water, and then circled inland towards the cliff and a big tree close by, and the male alone returned to the water. There is a hole at the end of a broken branch in the tree, and three holes in the cliff, but one has a spider's web across it, so can be left out of account. *January 27th.* The *Nettapus* at the same time (5.45) circled round up to the cliff, not up to the tree, and again the female disappeared. *January 28th.* Took up position commanding the two holes, but too near; birds suspicious and flew right away, and had not returned at dusk. *January 30th.* Saw female enter one of the holes. *February 2nd.* Went down with Belcher, and found the nest contained five eggs, very much incubated, so left them. The temperature inside the hole was many degrees higher than outside, quite hot, in fact. *February 5th.* Female again seen to enter the hole. *February 6th.* Went down to see if any of the eggs were hatched, as wanted to examine a young bird—difficult to imagine anything more delightfully perky than a baby Dwarf Goose—but the nest was empty and only contained split and broken egg-shells.”

From the above it would appear that the female, even during the period of incubation, leaves the nest during the day, and for several hours at a time, and, at least in this case, relied on the warmth of the downy nest and the heat retained in the rock. It was also interesting to note that the male bird always accompanied his mate close up to the cliff, and while she entered the nest—she shot in as nimbly as a Sand-martin



or Kingfisher—he swerved round, and settled on the water close by. This little goose was never observed resting on dry land; always on the water.

The eggs are oval and a pale cream colour.

*Sarkidiornis melanonotus.*

KNOB-BILLED GOOSE.

Plate XII.

*Sarcidiornis melanonota* Penn.

Sharpe's Hand List, Vol. I. p. 208.

*Sarkidiornis melanonotus* Penn.

Reichenow's Vögel Afrikas, Vol. I. p. 128.

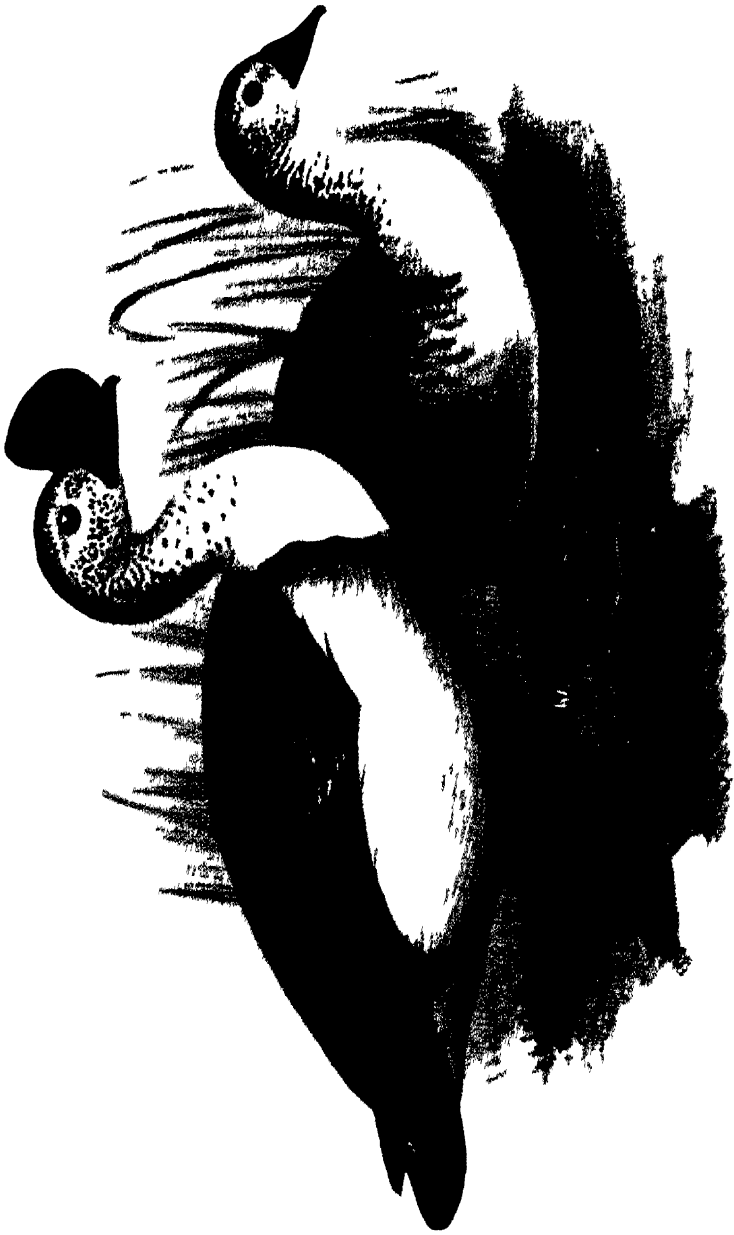
Sclater's Systema Avium Ethiop., Part I. p. 45.

*Description: Adult.* Upper parts blackish-brown, shining-coppery on the back, and brilliant green on the wing; rump brownish-grey; under parts whitish; flanks grey; head and neck white, freckled with black spots, which form a line from the top of the head, down the back of the neck. *The male has a large, elevated flattened black carbuncle extending down the centre of the upper mandible*; iris dark brown; bill black; feet black. Total length, 648 mm.; wing, 350–390 mm.

*The female* has the bill slaty-black, and the feet slaty-grey with creamish tinge. Total length, 540 mm.; wing, 279–291 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Kibwezi, Menengai Swamp, Naivasha, Molo River, Nzoia River, Entebbe, Lake Kyoga, Butiaba, Upper Tana River (Harrison). Buruma





Island (Doggett). Toro (Woosnam). Lake Wamala (Archer). Nakuru (van Someren).

*Notes.* This remarkable goose is widely distributed in the Colony and throughout Uganda. It appears to be a great wanderer, and during the rains may be met with in the most unexpected spots. For instance, in April a solitary adult male was obtained on a small rain pool at the foot of M'bwinzao Hill near Kibwezi; and, also during April, a small bunch of eight were found on a similar rain pool out on the open plain between Nakuru and the Molo River. At Naivasha, between the 17th and 22nd of April, a further note records it as "plentiful in bunches of four or five up to twenty. No pairs seen." In Uganda it is much more widely distributed, and assembles in considerably larger flocks, up to thirty and forty, or even more. In March they were in great numbers on Lake Kyoga; in Toro, in July, Mr. Woosnam came across a flock of twenty on a small crater lake; in October several fair-sized flocks were seen in a marsh near the mouth of the Nzoia River; also in October a flock of forty or more visited Entebbe Bay for two days; and in December, on Lake Albert, Mr. G. F. Archer saw for the first time on the 7th, after a stay of two months, two bunches of six or seven, and on the 8th three similar lots, and in his notes states that they are going south.

From the above it would appear that this goose is only a visitor: it was certainly never met with in pairs, nor was it noted anywhere in the coast regions. The gander is not only remarkable for the large flattened

knob on its bill, which I believe is always present in adult birds, and not merely assumed in the breeding season, but it is very much larger than the goose. It has a common habit of settling on dead and leafless trees. It breeds in Nyassaland, and Mr. C. Clifton Roberts, in the *Ibis*, 1924, p. 357, writes as follows: "It makes the usual nest of reeds lined with finer reeds or grass, and down, generally in a retired spot in thick reeds,<sup>1</sup> where the water is fairly deep. The eggs are from four to six in number, and are yellowish-white in colour when first laid. They vary considerably in size, but seem to average about 2".25 by 1".70 (*i.e.* 56 × 44 mm.).

*Alopochen ægyptiacus.*

EGYPTIAN GOOSE.

*Alopochen ægyptiacus* Linn.

Sharpe's Hand List, Vol. I. p. 125.

Sclater's Systema Avium Ethiop., Part I. p. 45.

*Chenalopex ægyptiacus* Linn.

Reichenow's Vögel Afrikas, Vol. I. p. 131.

*Description: Adult.* Upper parts ruddy grey; between the shoulders finely variegated with black, deepening into pure black on the rump, and brick-red on the wings; on the close wing a broad white patch commences on the shoulder, and extends half-way, when it is met by a brilliant green patch; near this junction the white is interrupted by a narrow black

<sup>1</sup> In India it nests mostly in hollow trees.

line, which extends across the white; under parts ruddy grey, finely mottled; the centre of the belly least so; in the middle of the posterior part of the breast is a patch of deep rufous; top of the head, chin, and cheeks dirty white; base of the bill, a patch round the eye, back of the neck, and ring round the lower part ruddy; iris yellow; bill mottled pinky-flesh, with dusky-black base; feet pale flesh colour. Total length: *male* 712 mm.; wing, 407 mm. *Female*, 686 mm.; wing, 378 mm. Weight, male, 5¼–6 lb.; female, 4–4½ lb.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Jipi near Lamu, M'pekaton, Lumi, Athi, Tsavo and Sabaki Rivers, Naivasha, Elmenteita, Nakuru, Hannington and Baringo, Il-polossat, Marsabit, many islands and other spots along the shore of Lake Victoria, Rusasa in Ankole, Kisinga Channel, Nimuli. S. Uaso Nyiro (Cosens). Pesi Swamp (Harrison). Toro and Jinja (van Someren). Tsavo (Praed). Kendu (Granvik). N. Uaso Nyiro (Lönnerberg).

*Notes.* The Egyptian Goose ranges throughout the Colony and Uganda from the coast to the Nile Valley. The Rift Valley, however, was, and probably is still, its headquarters; and for several years between September 1889 and 1894 Naivasha was the most favoured spot of all. Some idea of its numbers may be formed from an entry in my diary in September 13th, 1889: "Here (Naivasha), it can at times be seen in thousands on the open plains. When moving about, it associates in flocks of three or four, up to fifty or more, and it is only when out feeding on the short grass, or resting on

the edge of the lake, that it assembles in large parties of several hundreds together. It does not appear to have any particular feeding time, or one roosting place more favoured than another, as it is found at all hours of the day and night, both far away out on the grassy plains and miles from the water, and on the water's edge.

“ Last night I was very late in getting back to camp. There is something distinctly weird and uncanny about one's surroundings on an open plain, with not even a distant camp-fire as a guide, and unable to see anything, and yet surrounded on all sides by these geese, plovers, and Thomson's Gazelles, which respectively make their near presence known by their hissing and honking cackle, loud and angry screams, and pattering of feet. This morning Ramazan (gun-bearer) and I started for the lake at dawn, waded out beyond the fringe of papyrus to a small clump of reeds about fifteen yards beyond, and in water waist deep. Bunches of duck everywhere, coots literally in thousands, and on the opposite shore of the little bay several hundred geese. At the first shot the roar of wings and 'spattering' of coots' feet on the water was astonishing. It cannot be described, it must be heard. Shooting fast and furious for many minutes, then a lull until geese began to arrive from grazing grounds, evidently disturbed by Masai cattle and vast flocks of sheep and goats. In an hour and a quarter had to stop, couldn't afford more cartridges. Bag: 19 ducks, 22 geese, 5 pelicans, 3 flamingos, and 5 coots—total, 54 head. In another hour could probably have bagged another 20 geese or more, as the stand was

directly in their line of flight. During the day several ducks and geese drifted ashore dead, and were picked up and eaten by the porters."

In October 1894 both ducks and geese were just as numerous, and the latter were also in as great numbers as formerly at Elmenteita and Nakuru; in fact, there was little falling off in numbers until '95, though in alertness, at the sound of a gun, there was a very marked difference.

Then followed the Sudanese Mutiny in '97; and the constant stream of troops, Special Service Officers, transport and supply caravans, etc., during '98, and the perpetual pop-popping of guns and rifles not only drove the duck and geese to the far side of the lakes, but caused vast numbers to abandon them altogether. In nearly all other places, including Lake Victoria, it is a rare occurrence to meet with more than two together, except when a pair are with a family of young birds. On most of the islands, even the smallest ones, a pair of these handsome birds will be found, and they appear to be very partial to rock-bound promontories and spits, rather than to sandy and open shores. It used to be a common occurrence, when coasting in a canoe along the shore of some rocky, desolate-looking islet, to be suddenly greeted by an old gander with a loud hissing as he stood on the top of a distant boulder, while his mate, though near by, was hidden away amongst the rocks.

A peculiarity of many of these geese in Uganda, and not noticed elsewhere, is the absence of any web to their toes. At Entebbe, a tame bird, with a family of three



goslings, had all the toes quite separate, each toe having merely a slight rim of webbing along the sides. This goose, like the Spur-wing, frequently perches on trees. Various grasses and grass seeds form its principal food, and the four tame birds mentioned above afforded frequent opportunities of watching them stripping the seed-heads. A bird would seize the upright stem below the head by turning its own head sideways to enable a better grip; then by raising its head the seed-head was passed through its bill with rapid quivering chops of the lower mandible, and the seeds neatly drawn off. It breeds between February and May, and between September and November, but I do not think that a pair will breed twice in a year. A nest of a few straws and fragments of water-borne rubbish, and a considerable quantity of down, was placed between three large stones on Bridge Island in Lake Victoria, and contained six eggs, on February 13th. Another clutch of six eggs, much incubated, was found on the shore of Lake Albert in the nest of a Fish-eagle (*C. vocifer*), in a large Sycamore-fig tree, and some sixty feet from the ground, on February 26th. Mr. A. H. Neumann found this bird's eggs in the old nest of an Eagle, or Secretary Bird, near Lake Rudolph. On May 10th at Naivasha a goose was seen to enter a cleft in the face of a huge boulder just under the Sub-Commissioner's house, but on scrambling up, the nest, a mere scratching in a thin layer of earth and a little down, was found to contain only one egg. In October on a small rocky island in Lake Victoria a pair were seen with five goslings about ten days old, and in

April a pair at Naivasha had five goslings about a month old.

The eggs are creamy white, and measure 66-73 × 46-54 mm.

*Dendrocygna viduata.*

WHITE-FACED TREE-DUCK.

*Dendrocygna viduata* Linn.

Sharpe's Hand List, Vol. I. p. 214.

Reichenow's Vögel Afrikas, Vol. I. p. 124.

Sclater's Systema Avium Ethiop., Part I. p. 44.

*Description:* *Adult.* Above brown; the feathers broadly margined with fulvous; wings and rump blackish-brown; in the centre of the back a rufous patch; centre of under parts blackish-brown; flanks and sides transversely barred with fulvous; fore part of head, chin, and spot on the middle of the throat white, more or less tinged with fulvous; back of the head and neck black; front of neck and chest deep ruddy; iris brown; bill black, with ring of horn-blue round each nostril, also a patch on top of culmen; feet horn-blue with black markings down front of tarsus, and on the toes. Total length, 432-467 mm.; wing, 215 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* M'tangani, Jipi, Kiunga, Witu, Naivasha, Elgeyu, Menengai Swamp, Bussi Swamp. Kagera, Entebbe (Doggett). Thika (Praed). Lake Wamala (Archer).

*Notes.* The White-faced Duck, or "Whistling Teal,"

flanks, where the longer feathers have a broad mesial stripe of pale ochraceous, bordered by dusky; crown ferruginous, nape with a distinct brown-black stripe, commencing at the occiput; middle of the neck whitish, minutely streaked with dusky on the edges, above brownish-black, scapulars broadly edged with cinnamon, giving a barred effect; lesser wing-coverts chestnut; upper and under tail-coverts buffy-white; quills and tail dark-brown; iris brown; bill leaden-grey; feet blue-grey. Length, 468-508 mm.; wing, 200-220 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Kiunga Islands near Lamu, Berkeley Bay, Entebbe, Buddu. Nakuru, Magadi (van Someren). Lake Wamala (Archer).

*Notes.* The range of this Fulvous Tree-duck or Whistling "Teal" is similar to the foregoing, but in the Colony it is restricted to fewer localities. Both birds are partial migrants.

During several years' residence in the Lamu district, where its white-faced relative is so common and widely distributed, it was never met with until my collector Baraka found it breeding on the islands of the Kywhyu Archipelago, near Kiunga, in August. In the *Ibis* for 1916, p. 197, Dr. V. G. van Someren records having met with it on Lake Nakuru, and also near Magadi, where it was also breeding. But it is nowhere plentiful until Lake Victoria is reached. In February it was very plentiful in Berkeley Bay, and also in the marshes south of the mouth of the Nzoia River, in October. It was also

fairly common, and frequently obtained, in the vicinity of Entebbe, between August and March, when it disappeared.<sup>1</sup> It is a night feeder, and is invariably found resting during the day in quiet bays and backwaters, on grassy sudd, or islets of lily-roots and mud, amongst floating Water-lettuce (*Pistia strateoles*) and lily-leaves, and in small lots of five or six, or in flocks of thirty or more. Its flight is slow and heavy compared with other ducks, and it lacks the family smartness in appearance, due, no doubt, to the extra length of its neck, and the feet and toes protruding far beyond the tail.

Its call is a low, weak whistle, and is only heard when on the wing. If anything, it is a more confiding, not to say stupid, bird than the White-faced one, and will circle round and round a dead or wounded relative, and offer several easy shots before going away. It is curious that this duck, so essentially a lover of quiet, sheltered spots on inland waters, should select for

<sup>1</sup> Much more recent information supplied by Sir Geoffrey Archer shows that it visits Lake Wamala in astonishing numbers, and places that lake on an equality with Naivasha at its best, both in numbers and variety of geese and ducks. He writes as follows: "The Whistler is the commonest duck on the lake. Of the 623 bagged (in six week-end shoots, fourteen days in all and an average of seven guns) only about a dozen were the white-faced species. It is to be seen in enormous flights moving along the shores of the lake, several thousands on the wing together, about 3 o'clock in the afternoon. It comes in well to its feeding grounds at dusk. It is, of course, very slow on the wing and particularly easy shooting, except when it gets pretty high up after being much shot at, and kept on the move. It collects in great aggregations about August, lining the shores. About December the numbers seem to decrease and by June it is gone—presumably moving into the papyrus swamps to breed.

nesting such exposed and wind-swept coral islands half a mile or more from land, off Kiunga, or the arid, uninviting neighbourhood of Majadi. The two nests on the former were well hidden in the dense low scrub, and consisted of a few oddments and down. One contained thirteen eggs, the other eight.

Mr. C. C. Roberts found this duck breeding on Lake Chilwa in Nyassaland, and writes in the *Ibis*, 1924, p. 358, as follows: "The nest is usually placed in thick reeds growing in water four to five feet deep, and is constructed of reeds and rough grass, and lined with down and feathers. A clutch consists of five to seven eggs of an ivory-white colour, measuring 51 by 43 mm."

*Anas sparsa.*

BLACK DUCK.

*Anas sparsa* Smith.

Sharpe's Hand List, Vol. I. p. 216.

Reichenow's Vögel Afrikas, Vol. I. p. 115.

Sclater's Systema Avium Ethiop., Part I. p. 42.

*Description: Adult.* Throughout a dark brown, finely mottled on the head and neck with dirty-white, and marked on the wings and tail with large white spots; vent edged with white; across the wing is a bright green bar (speculum) edged with black and white, the black nearest the green; iris brown; bill black, with the tip slate colour, base pinky flesh colour; feet ochreous-yellow with dusky joints and black webs. Length, 527-553 mm.; wing, 230-265 mm. Weight of female, 1 lb. 11½ oz.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* M'baruk River, Gilgil, Eldama Ravine, Molo, Kamassia, Murgatan, Kidowa and Malawa Rivers. Buddu, Toro (van Someren). Mt. Kenya (Lönnerberg). Mt. Elgon (Granvik). Lake Höhnel (Mackinder). Kigezi (Fox). Aberdares (van Someren).

*Notes.* The so-called Black Duck appears to be confined almost entirely to the Highlands of the Colony, and to restrict itself mostly to rivers and streams in forests, or fringed with trees and tall overhanging bush; and on Mt. Kenya and Mt. Elgon to the torrents and the small isolated lakes at 13,000 and 13,800 feet respectively. It is very shy and retiring, and during the day skulks under the banks, and is very difficult to flush. Shortly after sun-down it repairs to its feeding grounds in marshes, the more open and less rapid parts of the rivers, or lakes; and nearly always follows the same line along the course of the stream, when going and returning. If seen at dawn the surest way of getting a shot is to mark the spot, and return just at sun-down, or dawn next day. Its call is a quack exactly like our Wild Duck at home, and it nearly always gives notice, at short intervals, of its approach. I have never seen more than two together. Both Professor Mackinder and Dr. Granvik obtained it on the icy-cold crater-lakes on Mt. Kenya, at 13,000 feet, and on Mt. Elgon at 13,800 feet. Dr. van Someren in the *Ibis*, 1916, p. 196, states: "A few pairs were seen on the lakes, in Buddu and Toro." I never met with it anywhere in Uganda, nor did Mr. Doggett, who rather specialised in the ducks

and other large birds, but Mr. Fox obtained an example in Kigezi.

On December 14th I had the good fortune to find a nest with six eggs on the Kedowa River, about a mile below Lumbwa Railway Station. It was in a slight depression in the damp earth among a few rushes on the edge of a small islet in mid-stream, and only two feet above the water—a very precarious position in a stream so liable to a sudden rise. The depression was lined with dry leaves, and beautifully banked up all round with down plucked from the bird's breast.

The eggs are cream colour, but although all six were quite fresh they were a good deal nest-stained. They measure 58–61 × 44–46 mm.

*Anas undulata undulata.*

YELLOW-BILLED DUCK.

*Anas undulata* Dubois.

Sharpe's Hand List, Vol. I, p. 216.

Reichenow's Vögel Afrikas, Vol. I. p. 113.

*Anas undulata undulata* Dubois.

Sclater's Systema Avium Ethiop., Part I. p. 42.

*Description: Adult.* Throughout a light brown, each feather broadly edged with white, giving it a scaled appearance; head and neck minutely mottled with white; a *green* band, narrowly edged with black, and again with white, extending partially across the wing; bill bright yellow, with the tip and centre of the upper

mandible black. Length, 500–560 mm.; wing, 230–270 mm. Weight, male, 2 lb. 3–4 oz.; female, 1 lb. 14 oz.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Naivasha, Nakuni, Elmenteita, Il-polossat, Menengai Swamp, Jipi, Yala and Nzoia marshes, Bussie Swamp, Toro Crater-lakes, Kigezi. Wamala (Archer). Ruaketenge, Karenge (Doggett). Thika (Praed). Machako's (Hinde). Kagio, Kutu (Lönnerberg).

*Notes.* The Yellow-billed Duck, of which there are two races, probably quite indistinguishable in their habits, is one of the commonest and most widely distributed of all the ducks found in the two territories. It ranges from the coast to Kigezi and Toro. At Jipi, near Lamu, it was only occasionally met with in September, and I believe was only a visitor. In the Rift Valley it is a resident, and found all the year round on Naivasha, Elmenteita, and Nakuru. Also on Il-polossat. Professor Lönnerberg, in his report on the birds collected by the Swedish Expedition, writes: "I saw and shot a young duckling in down as far as I could see belonging to this species, although I did not secure the mother bird. I did not see more than two young and the mother. It was in a small river in the thick forest on the eastern slopes of Kenia about 2700 m. above the sea." I venture the opinion that the last sentence suggests as more probable the Black Duck (*A. sparsa*), and not this bird.

During the rains or shortly afterwards it disperses, and may be found scattered far afield in marshes and on



temporary rain-pools. In September 1889, on Nainasha, after a prolonged drought and when the lake was much smaller, it was congregated in immense numbers; but no bird can stand shooting all the year round and its eggs collected for eating over a period of many years, and it is now much less plentiful. It was usually found in small lots of four or five and flocks of twenty or more, and, unfortunately for it, afforded capital sport, and is extremely good to eat. In April it is mostly in pairs, and breeds in May, June, and July. The nest is usually placed some little distance away from the water, and is well hidden in short scrub. Crescent Island was, at one time, a much-favoured spot. The nest is a mere scratching lined with a few dry grasses and a large quantity of down. The eggs, six to eight in number, are cream colour and measure  $46 \times 37$  mm.

*Anas punctata.*

AFRICAN TEAL.

*Nettion punctatum* Burch.

Sharpe's Hand List, Vol. I. p. 219.

*Anas punctata* Burch.

Reichenow's Vögel Afrikas, Vol. I. p. 120.

Sclater's Systema Avium Ethiop., Part I. p. 43.

*Description: Adult Male.* Umber-brown above with paler edges; crown, occiput, and quills dark brown; chin, throat, cheeks, rump, and under tail-coverts light

NOTE.—*Anas undulata rueppelli* Blyth, an Abyssinian race, may possibly range into British territory on Lake Rudolph, or elsewhere in the northern districts. It is distinguished by the colour of the speculum, which is *blue*, and not green, and by darker under parts.

brown; the last narrowly edged with darker brown; breast, lower part of neck, and under surface darker than on the rump; abdomen barred with black; speculum and secondaries bright brassy-green; the former edged behind with black, then with white; coverts brown, slightly glossed with brassy; tail dark brown; iris brown; bill slate-grey, black on top; feet leaden-grey. Length, 356-368 mm.; wing, 150-160 mm. Weight, 10 oz.

The *female* is like the male, but the markings are less distinct; under surface lighter. Length, 330-346 mm.

*Distribution.* Kenya; Uganda.

*Record Localities.* Naivasha, Nakuru, Elmenteita, Il-polossat, Rumuruti, Madu, Toro. Ankole (van Someren). Entebbe, Ruaketenge, Karengi (Doggett). Lake Wamala (Archer).

*Notes.* The African, or Spotted, Teal is the smallest of three species found in the Colony and Uganda, and is confined to the up-country lakes, from the Rift Valley to Toro. It is generally met with in pairs, or small family parties of five or six, in quiet nooks and corners among rushes, and close inshore, rather than on open water. During the wet weather it may often be sprung from small and recently formed and shallow rain pools or ponds, where food is both plentiful and easy to get at. It is very smart and quick on the wing, affords very good sport, and as a table bird has very few equals.<sup>1</sup>

<sup>1</sup> Sir Geoffrey Archer, in a letter on the duck shooting on Lake Wamala, writes: "The African Teal collects in parties of half a dozen to twenty, as a rule; but in a particularly favoured swamp I have, I think, seen as many as a thousand together."

On Naivasha it was mostly in pairs in February, and "scarce, and small lots of five or six" in April, and "very plentiful" in June.

The above notes, taken from my Journal, indicate that it breeds early in the year, but I am unable to say whether it does so in the vicinity of Naivasha, or on Il-polossat, where it was very plentiful in January; the latter is certainly a likely-looking spot. Mr. C. C. Roberts found it breeding in Nyassaland, and in the *Ibis*, 1924, pp. 358-9, writes as follows: "The nest is usually situated in reeds, not as a rule of a very dense nature, and where the water is not very deep. It is constructed of fine reeds and grass and lined with down and feathers, and well concealed. The eggs seem to be from four to six in number, and are when fresh pale cream in colour, and smooth in texture. They measure 45 × 35 mm."

*Anas capensis.*

CAPE TEAL.

Plate XIII.

*Nettion capense* Gm.

Sharpe's Hand List, Vol. I. p. 219.

*Anas capensis* Gm.

Reichenow's Vögel Afrikas, Vol. I. p. 120.

Sclater's Systema Avium Ethiop., Part I. p. 43.

*Description:* *Adult.* Head ash-grey, profusely streaked with blackish dots; lower part of neck and breast ash-grey, profusely variegated with reddish-brown broken bars, giving the plumage a scaled appearance;



XIII ANAS CAPEENSIS



feathers of the back dark reddish-brown, each feather edged with lighter; speculum of the wing bright green, edged with white and black; shoulders dark ash; iris pale yellowish-green; bill base black, the rest fleshy-pink with purple tint near the black base; feet dull yellow-ochre, with dusky joints, and black webs. Length, 400–470 mm.; wing, 185–215 mm. Weight, male, 15–19 $\frac{3}{4}$  oz.

*Distribution.* Kenya.

*Recorded Localities.* Nakuru, Elmenteita, Hannington. Naivasha (van Someren).

*Notes.* Until Dr. van Someren, in the *Ibis*, 1916, p. 196, gave Naivasha as a locality for this Teal, I had always been under the impression that it confined itself entirely to the brackish waters of Lake Elmenteita, Nakuru, and Hannington. Certainly Professor Reichenow gives Uganda (Ansorge) as a locality, but I regarded the "Uganda" in its widest sense, as the Rift Valley was included in the Protectorate until 1902; and I think it is more than probable that Dr. Ansorge obtained it on Elmenteita or Nakuru on his way up country.

Mr. G. H. Gurney "worked" Naivasha for a month, with the aid of a boat—between February 20th and March 19th—but never met with it, and it is possible that it is the Garganey, a regular visitor, which may have been mistaken for this bird.

In December, January, and February it is, or used to be, plentiful on Elmenteita and Nakuru, in small lots of three or four, up to a couple of dozen, and commonly in flocks of six to ten, but it was always a shy bird, and

kept well out in the open water for the greater part of the day, and only approached the shore towards evening. On one occasion a flock of fifteen resting on a sand-spit was stalked, and seven of them were bagged, all males, on examination; and I never succeeded in obtaining a female.\* It is, I believe, only a visitor.

*Anas querquedula.*

THE GARGANEY.

*Querquedula querquedula* Linn.

Sharpe's Hand List, Vol. I. p. 220.

*Anas querquedula* Linn.

Reichenow's Vögel Afrikas, Vol. I. p. 121.

Sclater's Systema Avium Ethiop., Part I. p. 43.

*Description: Adult Male.* Upper part of the head and occiput brown-black; from above the eye a whitish band, extending to the sides of the occiput; sides of the head and upper part of the neck chocolate-brown, streaked with white; chin black; back, rump, and upper tail-coverts blackish, each feather edged with greyish-olive; scapulars elongated and pointed, black, with central white stripe; breast with black and brown crescentic bands producing a scaly appearance; lower breast white; abdomen sides and flanks white, waved with narrow black lines; longer feathers of the flanks bounded by a subapical white band, and a bluish-grey

\* NOTE.—Since the above was written Dr. van Someren, in *Nov. Zool.* XXIX. 1922, p. 6, writes: "The female is more uniform on the lower surface than the male. A female, although an October bird, had swollen ovaries."

band at the tip; sides of rump and under tail-coverts whitish with black spots; upper wing-coverts and outer scapulars bluish-grey; wing speculum glossy green, bordered by white bands; primaries and tail brown, the latter edged with whitish; iris pale brown or hazel; bill dusky-slate; feet pale slate, or slate. Length, 388–425 mm.; wing, 185–195 mm. Weight, 13–15 oz.

*Female.* Upper part dark brown, each feather with a pale margin; broad superciliary stripe whitish, a dusky band behind the eye; sides of head and neck whitish streaked with black; chin and throat white; feathers of lower fore neck blackish, with whitish edges; breast and abdomen white; wings greyish-brown; a dull metallic-green speculum bordered by white bands.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Naivasha, Elmenteita, Lake Rubi. Wadelai (Emin). Lake Wamala (Archer).

*Notes.* The Garganey visits the Colony and Uganda between November (it reached Butiaba in '01 on November 16th) and April. In '08 a note in my Journal reads: "*June 12th.* Naivasha, Garganey in pairs, and small lots of six to eight. Very late." It is usually met with in small lots of three, up to six or seven. One flock of ten on Lake Rubi, in late April, were obviously resting on their way north. They remained all day, sleeping and preening themselves, in one spot, in a fringe of water-lilies in a quiet backwater, and within 200 yards of the P.S. "Samuel Baker," from whose deck, and a comfortable chair, a telescope showed up, at very short range, their smart perkiness and the distinct



hackled plumage of the cock birds. A single stray bird was seen, also in April, in the bay at the back of Entebbe,\* but Mr. Doggett did not meet with it on Lakes Ruakitunge or Karengi in Kigezi. At Naivasha it was mostly found among the water-lilies and short reeds, and was frequently shot in the dusk when flying along the lake edge.

*Anas erythrorhyncha.*

RED-BILLED TEAL.

*Poecilonetta erythrorhyncha* Gm.

Sharpe's Hand List, Vol. I. p. 220.

*Anas erythrorhyncha* Gm.

Reichenow's Vögel Afrikas, Vol. I. p. 118.

Sclater's Systema Avium Ethiop., Part I. p. 43.

*Description.* Upper parts brown, tinged faintly with green, each feather margined with pale pinkish; below brown, each feather so broadly margined with white

\* NOTE.—Up to the time the above notes were written, I was under the impression that the Garganey was a scarce bird, but quite recently Sir Geoffrey Archer has completely disillusioned me. In one letter he writes: "On November 27th they arrived (on Lake Wamala) in thousands, clouds of them"; and in another: "From the middle of November, when they arrive, the Garganey is the commonest of the visitors on the Lake. They are present in many thousands, wheeling and circling about their feeding grounds, with their conspicuous grey plumage flashing in the sun like Terns. They have the quickest flight of any duck there is—jinking and turning with amazing rapidity; while the quickness with which they 'pick up' the concealed gunners is most disconcerting. On the 27th April, 1924, they were still on the Lake, in good numbers, but, according to report of natives, were just beginning to leave. In six week-end shoots we (seven guns) bagged 246."

as to cause that colour to predominate; head and neck dark brown, the latter minutely mottled with dirty white; chin and lower parts of the cheeks below the eye white; on the wings a broad bar of pink, crossed at the upper side by a narrow green line; iris brown; bill, upper parts, black, the rest pink with purple shade (unripe plum); feet slate. Length, 445 mm.; wing, 224 mm. (C. Grant). Weight, male, 1 lb 3 oz; female, 1 lb.  $\frac{1}{2}$  oz.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* M'tangani, Jipi, Machako's, Naivasha, Elmenteita, Nakuru, Il-polossat, Meningai Swamp. S. Uaso Nyiro (Cosens). Useri River (Abbott). Lake Ruaketenge (Doggett). Lake Wamala (Archer).

*Notes.* The smart little Pink-billed Teal ranges from the coast to Kigezi, and probably to Lakes Edward and George. It has a knack of turning up anywhere, and may be met with in all sorts of unexpected places: on lakes, ponds, quiet reaches of rivers, in marshes, and on temporary rain-pools far away from permanent water. It is generally found in small lots of three or four up to eight or ten, and occasionally in large flocks of forty or more. Captain Cosens records a flock of fifty. It prefers quiet spots in shallow water, among short rushes and watergrasses, rather than open water, and as a rule is not difficult to approach. As many pairs have been noted on Naivasha in April, it probably breeds there, and also on Il-polossat. Mr. C. C. Roberts found it breeding on Lake Chilwa in Nyassaland, and in the *Ibis*, 1924, p. 589, writes as follows: "The nest is

made of sedge, lined with feathers and down, in reed-beds or thick rushes. Eggs five to seven, greenish-white in colour, and averaging  $51 \times 38$  mm."

*Spatula clypeata.*

SHOVELER.

*Spatula clypeata* Linn.

Sharpe's Hand List, Vol. I. p. 221.

Reichenow's Vögel Afrikas, Vol. I. p. 111.

Sclater's Systema Avium Ethiop., Part I. p. 41.

*Description: Adult Male.* Head and upper part of the neck, breast, and anterior scapulars white; middle of back dark brown, the feathers with pale edges; rump and upper tail-coverts black glossed with green; lower breast and abdomen rich chestnut; flanks, vent, and thighs paler, freckled with brown; under tail-coverts black, glossed with green; a white patch on the lower flanks at the base of the tail; upper wing-coverts and the outer web of two of the longer scapulars pale blue; remainder of scapulars black, all with a broad white stripe along the middle; last row of coverts tipped with white, forming a band bordering the glossy-green speculum; tail mostly white freckled with brownish-grey; iris dull yellow or greenish-yellow; bill slaty-black; feet pinkish-orange yellow or orange-red. Length, 489-508 mm.; wing, 232 mm. Weight, 1 lb. 8 oz.

*Female.* General colour of the upper parts, each feather with a broad reddish margin; throat reddish;

under parts reddish-buff-brown in the central part, especially on the breast and flanks; under tail-coverts lighter; the wings resemble those of the male, except that the blue of the wing-coverts is duller, and the speculum less glossy; iris hazel-brown; bill olive-brown; base and lower mandible orange-yellow; feet dull orange-yellow.

Most of, if not all the birds found in the Colony and Uganda are in mottled plumage, but Dr. van Someren records one in full plumage on April 15th, and Sir Geoffrey Archer one on Lake Wamala, in January.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Naivasha, Elmenteita, Nakuru, Hannington, Marsabit. Rudolph (Neumann). Lake Wamala (Archer).

*Notes.* The European Shoveler is only a visitor to the Colony and Uganda between November and April, and apparently it restricts itself in the Colony to the lakes of the Rift Valley only, except the isolated, forest-bound crater lake of Marsabit, which it probably uses only as a resting-place *en route*; and perhaps Il-polossat. In Uganda it has, so far, been recorded from Lake Wamala only. It is generally found singly, or three or four together, associating with other ducks, and coots. On Lake Hannington Captain Cosens obtained one out of a flock of about twenty-five. It is remarkable for its broad, spatulate, and deeply serrated bill, and also for its manner of feeding. This it does by stretching out its neck and head to the utmost, flat on the water, and as it slowly moves along, it sweeps the surface from side

to side in semicircles, collecting, sifting, and retaining by means of the highly developed serrations, all kinds of minute floating matter.

*Dafila acuta.*

PINTAIL.

*Dafila acuta* Linn.

Sharpe's Hand List, Vol. I. p. 219.

Sclater's Systema Avium Ethiop., Part I. p. 44.

*Anas acuta* Linn.

Reichenow's Vögel Afrikas, Vol. I. p. 117.

*Description: Male.* Head and neck hair-brown, darker on the crown, and faintly glossed on the sides with purple; upper half of hind neck black, with a white stripe on each side, confluent with the white of the lower neck and breast; back, sides, and flanks grey and dusky; upper tail-coverts black, the median broadly edged with grey and dusky; longer scapulars velvety-black, edged with whitish; wing-coverts uniform hornish-grey, the last row broadly tipped with cinnamon, producing a distinct bar; speculum from dull metallic-green to bright purple tipped with white, and crossed with a bar of velvety-black; the inner quills of the speculum velvety-black, with a white band along the inner part of the outer web; tertials grey with a central stripe of velvety-black, abdomen whitish dusted with grey, lower flanks with buff tinge; under tail-coverts black; iris brown; bill black above, dull leaden-grey on sides; feet greyish-black. Length, *male*, 610-762 mm.; *female*, 510 mm.; wing, 253-280 mm.

*Female.* Above dusky grey, varied with irregular bars of yellowish-white or pale ochraceous; head and neck whitish-buff streaked with blackish, except the throat; lower parts dingy white, the flanks, the abdomen, and under tail-coverts streaked with dusky; wings brown, with two white bars across, the space between dull brown, mottled with black; tail brown, with oblique buffish spots or bars.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Naivasha, Elmenteita, Nakuru. Mau (9100 feet) (Cosens). Lake Ruakatenge (Doggett). Lake Wamala (Archer).

*Notes.* The Pintail is another visitor between November and April, and a very fine and striking bird it is, too; quite unmistakable. One evening, while lying waiting for some Yellow-bills and Pochards to draw inshore to a small spit of mud and sand, and within range, a pleasant hour was spent with a telescope, in spite of myriads of midges, very similar to, if not the same as, the "Lake fly" of Uganda. Many coots were soon back on the spit, others standing in the shallow water—good decoys—and, of course, legions all around but further afield. Then the ducks began to draw in closer, and three Pintails, two drakes and a duck, appeared. But when all was going well, a Marsh Harrier came along, and away scurried the coots, and a little later the scare was repeated a second time, and all chance of a shot vanished. In the meantime, however, while concentrating on the Pintails, some of the indigenous ducks appeared within the circle of the tele-

scope, but they, though fine, shapely birds in themselves, looked very insignificant in comparison to their European guests.

The Pintail never was very plentiful, but it is less so now; generally keeps well away from the shore, and in open water during the day, and is usually found in small lots of three or four together, associating with other ducks, and surrounded by coots. I believe I saw it on Hannington, but am not quite certain, as the shimmer on the water, greatly exaggerated by a telescope, distorts everything. It may have been the Cape Teal (*A. capensis*).

*Nyroca fuligula.*

TUFTED DUCK.

*Fuligula fuligula* Linn.

Sharpe's Hand List, Vol. I. p. 223.

*Nyroca fuligula* Linn.

Reichenow's Vögel Afrikas, Vol. I. p. 107.

Sclater's Systema Avium Ethiop., Part I. p. 41.

*Description: Adult Male.* Head, neck, upper parts, and breast black, occipital feathers elongated and forming a crest; sides of the head with a purple gloss; a white spot on the chin; lower breast, abdomen, sides, and flanks white; vent and under tail-coverts black; wing black; speculum on the secondaries white; tail black; iris golden-yellow; bill pale blue-grey, with black nail; feet dark blue-grey, with black webs. Weight, 2 lb.

*Adult Female.* Crest smaller than in the male; upper parts and upper breast brown; the under parts dull white, or pale ashy-brown; flanks brown; speculum as in the male; inner secondaries glossed with green: iris brown; bill slate colour; feet slaty-grey, with darker webs. Length, 476 mm.; wing, 200 mm. Weight, 1 lb. 12 oz.—1 lb. 14 oz.

*Young in First Plumage.* Closely resemble the adult female, but are paler brown, and with no metallic gloss on the inner secondaries; there are many white feathers at the base of the bill.

*Distribution.* Kenya.

*Recorded Localities.* Naivasha, Elmenteita, Nakuru, N'kugule, Kikarongo. Yala Swamp (Turner).

*Notes.* The Tufted Duck visits the Rift Valley and Toro between November and March, and I believe it confines itself mostly to these two localities. It is met with in small lots of three or four, in pairs or single birds, by themselves or associating with other ducks. During the day, it keeps well away from the shore, in open water, and for that reason is not often shot. Furthermore, in the Colony, since 1897, when it was not uncommon, all the ducks and geese have become greatly reduced in numbers, and also are very wild, and difficult to approach. A pair and a single bird were seen on Lake N'kugule in Western Ankole, and also a pair and single bird on Kikorongo, in February.



*Nyroca nyroca nyroca.*

WHITE-EYED POCHARD.

*Aythya nyroca* Güld.

Sharpe's Hand List, Vol. I. p. 223.

*Nyroca nyroca* Güld.

Reichenow's Vögel Afrikas, Vol. I. p. 109.

*Nyroca nyroca nyroca* Güld.

Sclater's Systema Avium Ethiop., Part I. p. 40.

*Description*: *Male*. Head, neck, and upper breast rich chestnut; a small white spot on the chin; round the middle of the neck a brownish-black collar; back, scapulars, rump, and upper tail-coverts blackish-brown, the scapulars dusted with brown-chestnut; lower part of the breast, belly, and under tail-coverts white; sides and flanks brown, tinged with chestnut; wings blackish-brown; a white speculum, bordered below by a black band; outer primaries dark brown on the outer web and at the tip, white on the inner web, remainder white on the outer web; tail blackish-brown; iris chalky-white; bill slate marbled with blue-grey; feet slate colour. Length, 418 mm.; wing, 180-195 mm.

*Female*. Similar to the male, but duller; the chestnut of the head browner, and that of the chest suffused with white, and less clearly defined from that of the under parts, which are more or less tinged with brown; feathers of the mantle and scapulars with brownish-buff edges.

*Distribution*. Uganda.

*Recorded Locality*. Butiaba.

*Notes*. The Ferruginous Duck, or White-eyed Pochard,

ranges as far south as Lake Albert in November. A male bird was obtained out of a flock, fighting at dusk, by Mr. G. F. Archer; and it is, I believe, the only one obtained so far south. Messrs. Sclater and Praed, in their "Birds of the Anglo-Egyptian Sudan," give Khartoum as the "furthest south."

*Nyroca erythrophthalma.*

AFRICAN POCHARD.

*Athya erythrophthalma* Neuwied.

Sharpe's Hand List, Vol. I. p. 223.

*Nyroca capensis* Cur.

Reichenow's Vögel Afrikas, Vol. I. p. 108.

*Nyroca erythrophthalma* Wied.

Sclater's Systema Avium Ethiop., Part I. p. 41.

*Description: Adult Male.* General colour above, deep brown, minutely variegated with grey; below, deep brown, tinged with rufous, more especially on the flanks and shoulders; lower part of the neck and breast approaching to black, tinged with faintest purple; cheeks and sides of upper part of neck, rich dark chestnut; *a small spot on the chin, and bar on the wing white*; iris crimson; bill slate colour, tip black; feet slate colour with darker webs. Length, 476–489 mm.; wing, 210–230 mm. Weight, 1 lb. 14 oz.

*Female* throughout a lighter brown, approaching to white on the under parts, and all tinged with dirty rufous; chin, anterior portion of throat, base of the bill, and stripe through the eye white.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Jipi, Naivasha, Nakuru, Elmenteita, Il-polossat, Marsabit, Madu, Toro. Machako's (Hinde). Lakes Ruaketenge, Kareng'e (Doggett). Soy (Granvik). Eldoret (van Someren). Lakes Wamala and Bunyoni (Archer).

*Notes.* The African Pochard holds the same position among the Diving Ducks as the Yellow-bill does in the Surface-feeding Ducks; it is the commonest, almost as widely distributed, and its range is equal to the two races of the latter. On the coast it was very plentiful in the chain of small lakes and lily-covered ponds at Jipi, in September and October. On the morning of my arrival there, the first of these ponds, about fifteen acres in extent, four to five feet deep, and dotted with a few small islets, in reality grass-covered ant-heaps, a wonderful spectacle in bird-life disclosed, and appended is an extract from my diary: "1885, *September 12th.* After hour and half walk reached Jipi, a large slave village, and half a mile beyond arrived at the first pond, one of several. Never saw anything like it; Blue Herons and Egrets, Ibis and Claw-billed Storks scattered all round the edge; Darters and small Cormorants on stumps, poles, submerged fish-traps, and anything floating that could bear their weight, resting and drying their wings; Black and White Kingfishers very busy, and hovering in the air; Ducks and a family party of Pigmy Geese scattered over the fringe of water-lilies, and, on the open water beyond, masses of Brown-headed Duck with white bar on wings; one bunch of

sixty to seventy, and two others of about forty, besides small lots, and single birds scattered over the surface. Decided on drive. Ramazan and self waded out to an ant-heap, and the fun soon began. Up got the Duck with a roar of wings, and what with the squawk of Herons and startled cries of Ibis (Hagedash) all around, shot wildly at first, when the big lot of duck came straight towards me, but improved as they came round a bit higher up, and again a third time. Knocked down twenty-seven, but alas! only picked up fourteen. Made mistake in not taking three or four men with me to retrieve as they fell, as a lot escaped by diving, and cartridges ran out after wasting a lot at cripples." I believe these birds were only visitors to Jipi. Anyhow the place was abandoned on my last visit in September 1902, as all the ponds were either dry and over-grown with bush and scrub, or reduced to marshes; and the big lake of open water, the former home of Pelicans, Fish-eagles, and Ospreys, was reduced to a reedy pond, tenanted by a single female White-faced Tree-duck, with small family. Also the once prosperous village—from the Arab slave-owner's point of view—was reduced to a small group of huts occupied by old decrepit slaves, no longer of any value.

On all the lakes in the Rift Valley, and particularly on Naivasha, this duck was almost as plentiful as the Yellow-bill; in small lots of three or four, to flocks of about twenty. In Toro it is common on most of the crater-lakes, where, in the deep open water, it can obtain its food by diving. It is easily distinguished from other

ducks when in flight by its dark colour, and *white* bar on the wings. On Naivasha it breeds between May and July, and in Toro from March to June, and in November. On Naivasha in April '03 it was "still in flocks of about twenty, and a few single birds, mostly females," and in '08 "No Pochards seen in June, or early July, no doubt nesting in the reeds at north end," and in Toro, a note states "mostly in pairs in February."

In a note on this bird on Lake Wamala, Sir Geoffrey Archer writes: "The Pochard remains always on the open water, and unless killed instantly, is a most troublesome diver. They are generally in large companies of sixty to eighty or more, and are easily distinguished from the other species by their much darker colour, slate-blue bill, and white bars on the wing, conspicuous in flight." Again, in a further note: "On Lake Bunyoni in Kigezi, which is a crater lake, and very deep, the Pochard is the only one found in any numbers. They are always on open water, generally in troops of thirty or forty, though sometimes scattered like coots over the surface. Between 5 and 6.30 p.m., they fly down the centre of the lake in great numbers, and about dusk I have seen a great aggregation of fully a thousand birds riding the open water. Between 6 and 6.30 a.m. they all return, flying as a rule very high, and affording really first-class and most difficult shooting for a line of guns extended in open order across the lake. They are the most persistent divers, and in spite of the absence of weeds, many of those not killed outright get away."

A nest found on Naivasha on July 7th was placed

in a thick tuft of broad-leaved rushes in water about four feet deep just inside the papyrus, and another, on a small lake at Madu in Kitunzi, was in an exactly similar position on November 25th. The former contained six much-incubated, the latter seven fresh cream-coloured eggs. They measure  $56 \times 43$  mm.

*Thalassornis leuconotus leuconotus.*

WHITE-BACKED DUCK.

*Thalassornis leuconotus* Smith.

Sharpe's Hand List, Vol. I. p. 226.

Reichenow's Vögel Afrikas, Vol. I. p. 106.

*Thalassornis leuconotus leuconotus* Eyton.

Sclater's Systema Avium Ethiop., Part. I. p. 40.

*Description.* Back white; all the rest of the upper parts variegated with fulvous, black, and rufous; under parts fulvous, transversely striped with dark brown, least so in the centre of the breast and abdomen; head and back of neck fulvous, profusely mottled with black round spots; front and sides of lower part of neck bright fulvous; chin and spot at each side of the bill white; iris brown; bill black with yellow spots; feet dark slate. Length, 360–407 mm.; wing, 160–180 mm.

*Distribution.* Kenya; Uganda.

*Recorded Localities.* Jipi, Naivasha, Menengai Swamp, Entebbe, Bussi. Lake Ruakelenge (Doggett). Soy (Granvik). Lake Wamala (Archer).

*Notes.* The White-backed Duck ranges from the coast to Kigezi, and probably to Lake George in Toro.

It is a sturdy, thick-set little bird, and the least smart in appearance and movements of all the ducks. It is a resident but local bird, of retiring habits, but not difficult to approach. As a rule it is found singly or in pairs, sometimes three or four together; and if attended by a brood of ducklings, in family parties of ten to a dozen, since the female lays as many as fourteen eggs. It is almost invariably found among water-lilies fringing lakes and quiet bays, and under the lee of reed beds. It is an expert diver, and has difficulty in rising from the water, and has to run and patter along the surface for some distance, like a Coot. Once under way it is fairly strong on the wing, but flies low and only a few feet above the water, like a Grebe.

If not killed outright, and it takes to diving, it may, in most instances, be given up as lost.

On Naivasha it breeds in June and July. The nest is well hidden, and made of dry leaves of rushes and water grass, and is placed just inside the edge of a reed bed, so that the sitting bird can slip off and retreat by diving at the approach of an intruder. If the nest is placed a foot or more back in the reeds, its position is indicated from outside by a little "run." One nest containing two eggs was in an old coot's nest, in a thick tuft of short rushes. The eggs, eight to fourteen in number, are remarkably large, and a soft pale brown in colour. They measure  $66 \times 50$  mm.

*Erismatura maccoa.*

## MACCOA DUCK.

*Erismatura maccoa* Eyton.

Sharpe's Hand List, Vol. I. p. 227.

Reichenow's Vögel Afrikas, Vol. I. p. 105.

Selater's Systema Avium Ethiop., Part I. p. 40.

*Description: Male.* Upper parts chestnut brown; under surface and wings brown; head and upper parts of neck black; tail-feathers very narrow and rigid; iris brown; bill blue-grey; feet ash-grey. Length, 450 mm.; wing, 160–180 mm.

*Female.* Generally of an umber-brown, with the chin and sides of the head clear white. Length, 407–450 mm.; wing, 160–180 mm.

*Distribution.* Kenya.

*Recorded Localities.* Naivasha. Nakuru (van Someren).

*Notes.* The Maccoa Duck is, I believe, only found in the Rift Valley, and Naivasha is the only place I have met with it. It is a resident, and formerly was fairly plentiful in pairs, single birds, and small lots of five or six. Now it is the rarest of the resident birds. Apart from the striking colouring of the adult drake, it is remarkable for the curious manner in which it carries its stiff tail, upright and at right angles to the line of the back, when at rest on the water, and undisturbed. It is an expert diver. It breeds in June and July. The nest is made of dry leaves of rushes and water



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grass placed on the disused, sodden, but floating reed-platforms of the Great Crested Grebe, just inside a bed of tall reeds or papyrus, and in water four feet deep. Two nests were found, exactly alike, but one only contained a single egg. It is pale greenish-white, rough, and with a slight gloss, and measures 66 × 51 mm.





