

van Someren del.

OENA CAPENSIS CAPENSIS, Linn. ♂

THE BIRDS OF KENYA AND UGANDA.

PART VII.

By

V. G. L. VAN SOMEREN, M.B.O.U., C.F.A.O.U., ETC.

FAMILY COLUMBIDÆ.

GENUS **OENA**, Swains.

Oena capensis capensis, Linn. Long-tailed Dove.

Ref. Linnaeus, Syst. Nat. 12th Ed. p. 286,
1766.

Type locality: Cape of Good Hope.

DISTRIBUTION:

Throughout Kenya and Uganda in suitable localities.

DESCRIPTION: MALE, ADULT:

Forehead and anterior portion of head to mid-orbital line, the whole of the throat and upper breast jet black; remainder of the head pearly-grey, paler at the line of junction with the black, and on the cheeks and side of neck. Nape, mantle and scapulars and innermost secondaries ashy-grey-brown shading to pearl-grey on the wing coverts; the innermost wing-coverts tinged with ashy-brown. The lower back is banded with three bars, two black, with a greyish-buff bar between; the rump is ashy-grey shading to grey laterally and on the upper tail-coverts; these latter with broad black-shaped tips. Primaries and primary-coverts bright cinnamon with broad blackish edges and tips, shading to greyish at the margins; secondaries cinnamon along the shaft with an increasing amount of greyish shading from without inward until the innermost ones are greyish-black strongly shaded along the outer web with pearly-grey; the edge of the inner webs inclining to black. Some of the inner long secondary-coverts are ornamented with steel-blue to purply-blue iridescent patches.

Breast and abdomen white, the former tinged with grey at the sides of chest. Central under tail-coverts black, lateral ones black and white or white. The rectrices are abruptly graduated the central pair being one and a quarter times longer than the outermost pair. On the upper side the central pair are ashy-grey at the base inclining to grey mesially, and towards the tips are blackish; the next two pairs are grey at the base, black at the distal half; the three outer pairs are light-grey with a broad sub-terminal black band while the outermost pair have the outerwebs white. From below, all the rectrices with the exception of the outer webs of the outer pair, are black.

Eyes brown or light brown; bill yellow at tip and red or carmine at the base; feet crimson or purple-madder. Wings 95-105 mm. Tail 140-145 mm.

FEMALE :

Differs considerably from the male; the black " front " is entirely wanting, instead, the front of the head is whitish shading to very pale grey on the cheeks and front of the crown, these in turn shading into ashy-grey-brown on the occiput, the ear covert, side of neck and upper chest. A black spot in front of eye. The mantle, scapulars and long coverts and inner lesser coverts are ashy-grey-brown merging into grey on the secondary and lesser coverts. Primaries and secondaries as in the male but with paler cinnamon; and the blue spots are more restricted. The rest of the plumage is similar to the male, though the tail is not so long. Eyes brown; bill purple-madder at the base, blackish at the tip; feet purple madder. Wings 95-100 mm.

JUVENILE :

The nestling plumage is ashy-grey above, each feather broadly tipped with buff, with, on the breast, a blackish pen-ultimate bar; the forehead and throat are whitish; the breast and abdomen a dirty white.

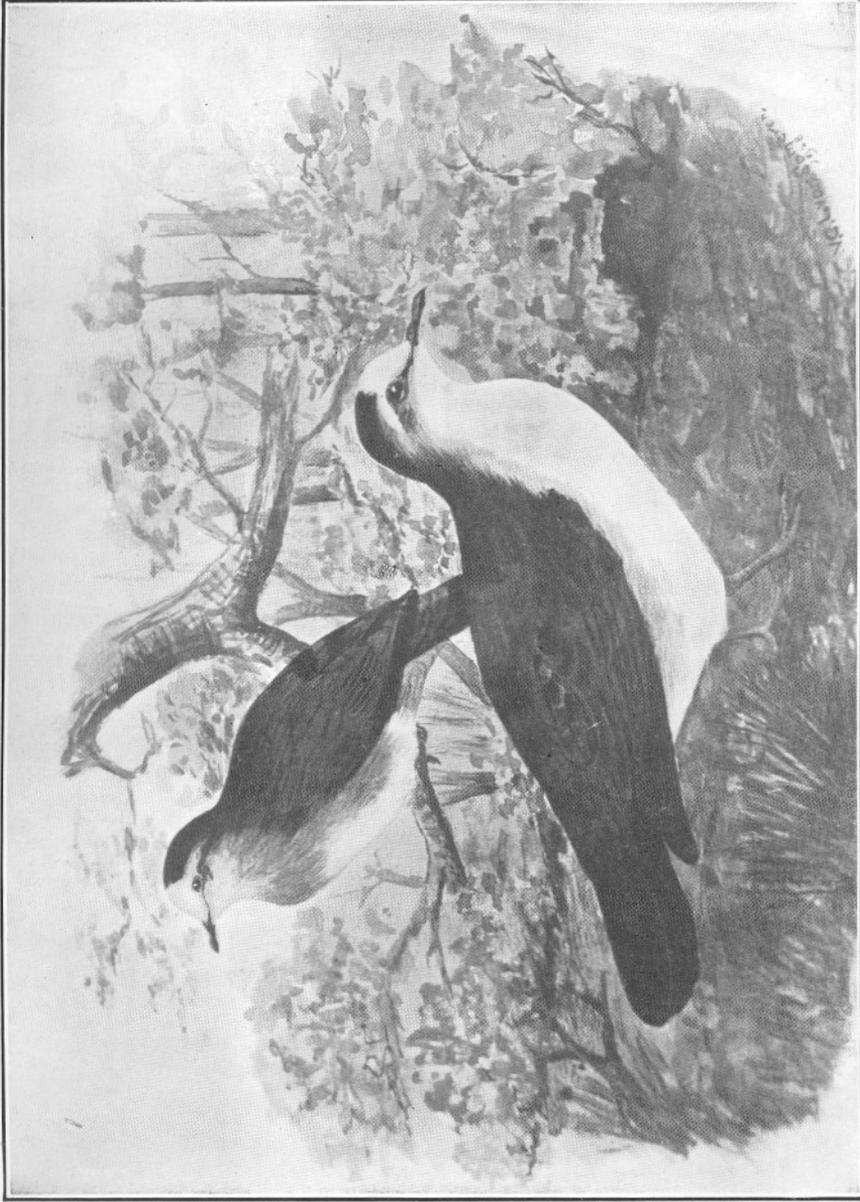
In the first feathered plumage the barred feathers of the head, mantle and chest persist for a long time the lateral aspects of the last area are the first to change to a greyish with narrow buff edges; the feathers of the scapular region, and the wing coverts have large sandy-buff tips edged with white distally and outlined proximally with black, giving to these areas a speckled appearance. The primaries and outer secondaries are cinnamon only on the inner webs, and all are tipped with rustybuff. The under tail-coverts and three outer rectrices are tipped with buff; the breast and abdomen are white.

HABITS :

The Little Long-tailed Dove is found from the Coast inland through Kenya to western Uganda. It is a bird of the open thornbush and park-like country and does not occur in the forests. We have no records of it having been seen anywhere over 6,500 ft.

It is particularly plentiful in the low country south of Nairobi to the coast, in the southern Masai Reserve, the Kedong, the country round Lake Victoria, through the northern Guasso Nyiro area to Baringo and Rudolf.

We have frequently seen this bird in native shambas, but examination of stomach contents has always shown that very little or no cultivated grain is taken, indeed the bulk of the food appears to be minute seeds of weeds, picked up from the ground.



♀

♂

van Someren del.

TYMPANISTRIA TYMPANISTRIA FRASERI, Bp.

They undoubtedly have a preference for open ground where these small seeds are readily picked up. Thus one seldom if ever sees the birds in grass veldt country. Though generally distributed throughout suitable localities in pairs or small parties, there are certain times when they occur in flocks of a dozen or more. This flocking is governed by the presence in a given locality of some particular seed to which the birds are partial. Usually one puts the birds up in pairs; the flight is quick and direct but of short duration, advantage being taken of the nearest cover behind which they drop and at once begin feeding. The Long-tailed Dove is undoubtedly the daintiest and most sprightly of the Ground-doves; its actions are quick yet full of grace. As the bird alights on the ground the tail is raised, partly fanned then depressed, but is usually carried above the tips of the wings. This movement is not peculiar to the species, for we find it in species belonging to the genus *Turtur*.

The nesting season is not fixed but is more or less influenced by the rains. Most nests have been found towards the end of the rains, thus we have records for January to March and from August to October and in December. The nests have always been very near the ground, in fact on more than one occasion the nest has actually been placed on the top of an ant-hill surrounded by vegetation but usually it is built about a couple of feet up in fairly thick cover preferably a creeper. The actual nest is a platform of slender twigs and rootlets mostly the latter, so that actually it is more compact than the usual run of Dove's nests. The eggs, two in number are small 15 x 20 mm., and pale cream in colour with a semimatt surface. Both parents take part in constructing the nest. Although this is a common species, I have never heard its call, nor can I find any description of its note.

GENUS **TYMPANISTRIA** Reichenb.

***Tympanistria tympanistria fraseri* Bp.** White-breasted Wood-Dove.

Ref. : Bonaparte, *Consp. Av.* ii, p. 67. 1855.

Type locality: Fernando Po.

DISTRIBUTION :

In wooded districts through Uganda and Kenya.

DESCRIPTION : MALE, ADULT :

The front of the head to the mid-orbital line pure white, this colour extending back over the eye and downwards to the posterior aspect of the ear-coverts. A black streak in front of the eye. The throat, cheeks, breast and abdomen pure white; the flanks white washed with ashy-brown. The remainder of the crown dark ashy-brown inclining to greyish at the junction with the white forehead,

and on the posterior earcoverts, becoming more brownish at the nape and neck but tinged with grey where it joins the white of the fore neck and breast. Mantle, scapulars, wing-coverts and inner secondaries, rump, upper tail-coverts and tail, hair brown with a bronzy-gold sheen, duller on the rump, but with a rufescent tinge on the rectrices. The rump is crossed by two dark-brown bands with a light brown area between. The primary coverts, the primaries and secondaries cinnamon, shaded on the outer webs and ends with dark brown. On the inner secondary coverts and innermost secondary are four to five dark blue, purple-blue to black metallic spots. The under tail-coverts are grey-brown while the under surfaces of the rectrices are greyish at the bases and tips with a blackish bar sub-terminally.

Under wing-coverts and axillaries cinnamon. Eyes brown; bill purple madder at the base and black at the tip; legs purple madder. Wings 115-120 mm.

FEMALE:

Adult: Somewhat like the male, but with the white of the forehead tinged with grey, as are also the cheeks; the throat is white but shades off gradually into a very delicate blue-grey at the breast band. The ear coverts are dark-brown. The depth of colour of the breast-band varies; in some specimens it is decidedly grey while in others it is merely tinged. The mature, though youngish female has a decided band which is tinged with ashy-brown. Wings 111-115 mm.

JUVENILE:

The nestling has a distinct plumage, traces of which are retained up to the sixth month. The forehead and eye stripe are cinnamon, becoming darker, more brownish on the back of the crown and neck; each feather with a tip and bar; the mantle and wings are light reddish-brown barred with darker brown; the feathers of the scapulars and inner secondaries with pale tips.

The throat, chest and breast are tawny ochreous, banded with dark brown; the abdomen is a buffy white.

This barred plumage lasts about four months (captive birds) when either the full male or female plumage is assumed straight away, with no intermediate dress.

HABITS:

The White-breasted Wood-Dove is found from the Coast to Lake Victoria and throughout Uganda, but only in such localities as are suitable. It is a bird of the forests and well wooded areas, and of tree-fringed rivers. Away from habitations it is a decidedly wild and

shy species, intolerant of man and excessively timid. In certain well-timbered gardens in Nairobi, however, where the birds have nested regularly for many years they have become quite tame. In spite of its very contrasty plumage this bird is difficult to detect in the half light of the forest either when feeding on the ground or in flight away from one, but if it should turn side-on the white underside is very conspicuous. Its flight is extremely rapid, seldom straight, usually zigzag, and never high; the marvellous thing is that even at such a high speed it can dodge amongst the branches of low trees without coming into contact with some obstacle. Their eyesight must be acute, for on one occasion when trapping birds in the forest I had a hang-net stretched across a narrow "ride," a Dove suddenly shot into the space and I made certain that it would dash into the obstacle, but within a foot of the net it suddenly shot vertically up and carried on! Though the contrast between the dark upper and white lower surfaces is so great yet when the bird is sitting in a tree it is hard to detect; the outline is completely broken.

These birds take all their food on the ground; it consists of seeds, small land shells, and insects. They take well to captivity and readily eat a mixture of meal and hard-boiled egg. They nest regularly and rear their young with care. In the wild state there appears to be no fixed nesting season; we have seen nests in every month of the year except January and February.

The nest is a flimsy structure composed of slender twigs and rootlets and built fairly low down, seldom more than twenty feet from the ground, usually about ten. The actual site is usually a shady spot well protected above by overhanging branches, but the nest is usually visible with ease from below. Jackson has recorded the nest of this species built on top of a disused Coly's nest.

The call is peculiar and though somewhat like that of two other species of ground-dove, is however distinctive. It is rather a mournful though sweet sound consisting of two quite loud and prolonged coos followed by seven coos gradually diminishing in intensity and tone until the last is almost inaudible.

During the nesting season one meets these birds in pairs, but at other times they are solitary. One may occasionally come upon a family party of four, but it is remarkable that only one young appears to survive. Either an egg is knocked out of the nest or one of the newly fledged youngsters falls a prey to some enemy before it can fly properly. The young are fed for quite a long time, but as soon as they can fend for themselves they are driven off by their parents. In spite of its protective colouration, I have more than once seen an adult dove captured by Verreaux's Falcon and have seen the remains of birds undoubtedly captured by Gennetts, the latter probably having

secured a roosting victim. The species in common with others of the family is very conservative with regard to a particular roosting place. The same branch will be used for months on end even when the nesting season is on.

This Wood-Dove is equally tenacious in adhering to a restricted locality; in one particular forest which I used to visit at least once a week for the greater part of two years, I could always count on seeing at least four pairs of these doves, each pair within quite a small area of about five acres or so; there was never more than just the pair except when the young were newly on the wing.

GENUS **TURTUR**, Boddaert.

Turtur afer killimensis, Mearns. Blue-spotted Ground-Dove.
Ref. Mearns, P.U.S.M., Vol. 48, p. 383, 1915.
Type locality: Kilimanjaro.

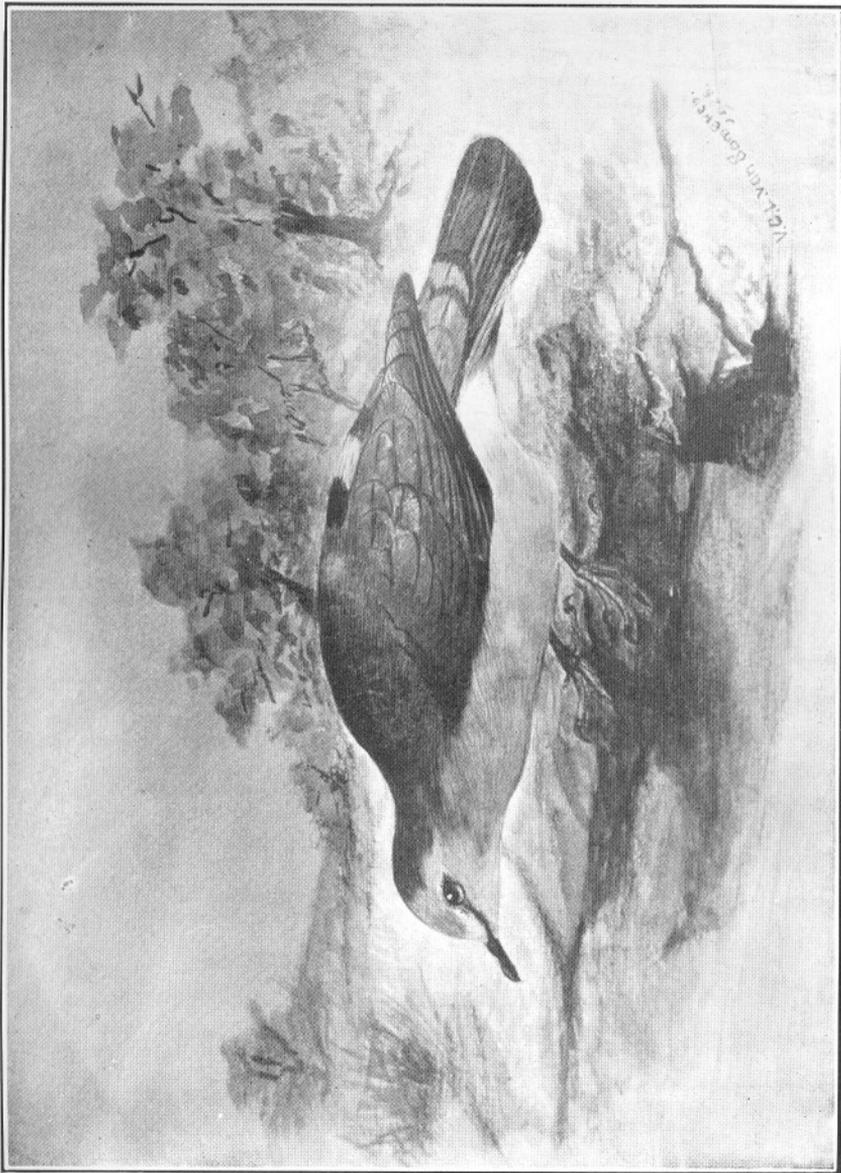
DISTRIBUTION:

From the south-western districts of Kenya through Uganda.

DESCRIPTION: MALE, ADULT:

Forehead white shading to pearl and then lead-grey on the top of the crown and to ashy-grey on the occiput, and extending over the eye to the side of the crown as a blue-grey streak, outlined along the lower edge and round the eye with white.

Nape and hind-neck ashy-brown shading to umber-brown on the mantle and to greyish-umber-brown on the wing-coverts. Throat white or pinkish-buff shading to vinaceous-drab on the cheeks and ear-coverts and to vinaceous-brown with a greyish bloom on the chest, which in turn shades off into pinkish-buff on the abdomen to become buffy-white on the vent. The lateral under tail-coverts are white, the central ones black. The three inner long secondary coverts have each a large metal blue spot, in front of which are other three spots of the same colour on the upper lesser coverts. The primaries and outer secondaries are cinnamon edged and tipped with brownish-black, while the inner secondaries are also cinnamon centrally but with an increasing amount of umber-brown shading, from without in; the innermost being uniform brownish. The lower back, rump and upper tail-coverts are umber-brown; the rump is crossed by two broad black bars with an ochreous-buff bar between, while the terminal coverts are tipped with black. The rectrices on the upper surface are mostly brownish but the three outer pairs are grey on the inner web, washed with brown on the outer web; that of the outer pair white. The three outer pairs are banded with black subterminally while the rest are shaded black at the ends. The under wing-coverts and axillaries



van Someren del.

TURTUR AFER KILIMENSIS, Mearns.

are light cinnamon. The eyes are brown or red-brown; the bill carmine or purple-madder at the base, shading to pinky-yellow at the tip; legs purple-madder. Wings 105-113 mm.

FEMALE:

The female resembles the male.

JUVENILE:

The nestling plumage is a rufescent-brown above and on the chest, barred with blackish-brown; the feathers of the scapular region and inner coverts with buff tips. The remiges are cinnamon with dark tips and edges and dark vermiculations. The forehead is buff as is also the belly. The bill and legs are brownish-purple.

The first full feathered plumage is an admixture between the nestling and adult phase. The characteristic metallic spots appear on the wing but the tips of the feathers so decorated are barred with alternate brown and blackish bands. The breast, mantle and lesser coverts are similar to those of the adult. The bill and legs remain blackish until the adult plumage is assumed.

HABITS:

The Blue-spotted Ground-Dove has a peculiar distribution in Kenya, being found only in the south-western corner of the Colony whence it spreads up through Tanganyika into Uganda where it is plentiful and widely distributed. It occurs in the Kavirondo country and Kisii area but does not come into the highland area of Kenya, nor do we find it in the Coastal zone. It lives in all types of country other than dense forest and open grass plains; it is partial to cultivated areas round habitations and scrub country.

It is remarkably tame and will merely flutter out of one's way. It has a habit of squatting on the ground if anything comes near it and not taking wing until the last moment when it springs up suddenly with a flutter and goes off with a zigzag flight to pitch almost at once in some open spot. When the bird alights it raises and dips its tail, fanning it just as it touches the ground.

The species is almost entirely terrestrial, seeking the majority of its food below the dwarf acacias and scrub and in patches of native cultivation. One may frequently see these birds feeding along roadsides and it is with difficulty that they can be made to leave the track; they merely fly a few paces ahead of one and having alighted they at once commence to feed. Although a common species one usually meets the birds in pairs, often singly, never in flocks. The call note is distinctive and fascinating though rather plaintive; it is usually uttered when the bird is in a tree and resting, and consists of a series of coos, the first very low and almost inaudible, coo, coo-

coo, coo-coo, coo-coo, tu, tu, tu, tu, tu, tu, tu, tu, increasing in tone and volume up to the last coo and then decending rapidly in decreasing tone.

Nests and eggs of this species have been taken or seen in almost every month of the year, but the majority have been recorded between July and December. The nest is a frail structure, composed of fine twigs and rootlets, placed rather low down in some small shady tree on a convenient horizontal fork. We have on occasion found the nest on the top of a wide-spreading papyrus stalk and very frequently the nest has been built on an Ambatch tree growing well out in the water near the lake side. They occasionally make use of an old nest such as that of the Little Green-backed Heron, or as recorded by Jackson, that of the Uganda Thrush (*T. p. centralis*).

The eggs, two in number, are a pale creamy white, with little gloss; measuring 22 x 16-17 mm. Both parents take part in incubating the eggs and feeding the young.

Turtur chalcospilos chalcospilos, Wagl. Emerald-spotted Ground Dove.

Ref. Wagler, Syst. Av. Columba, sp. 83, 1827.

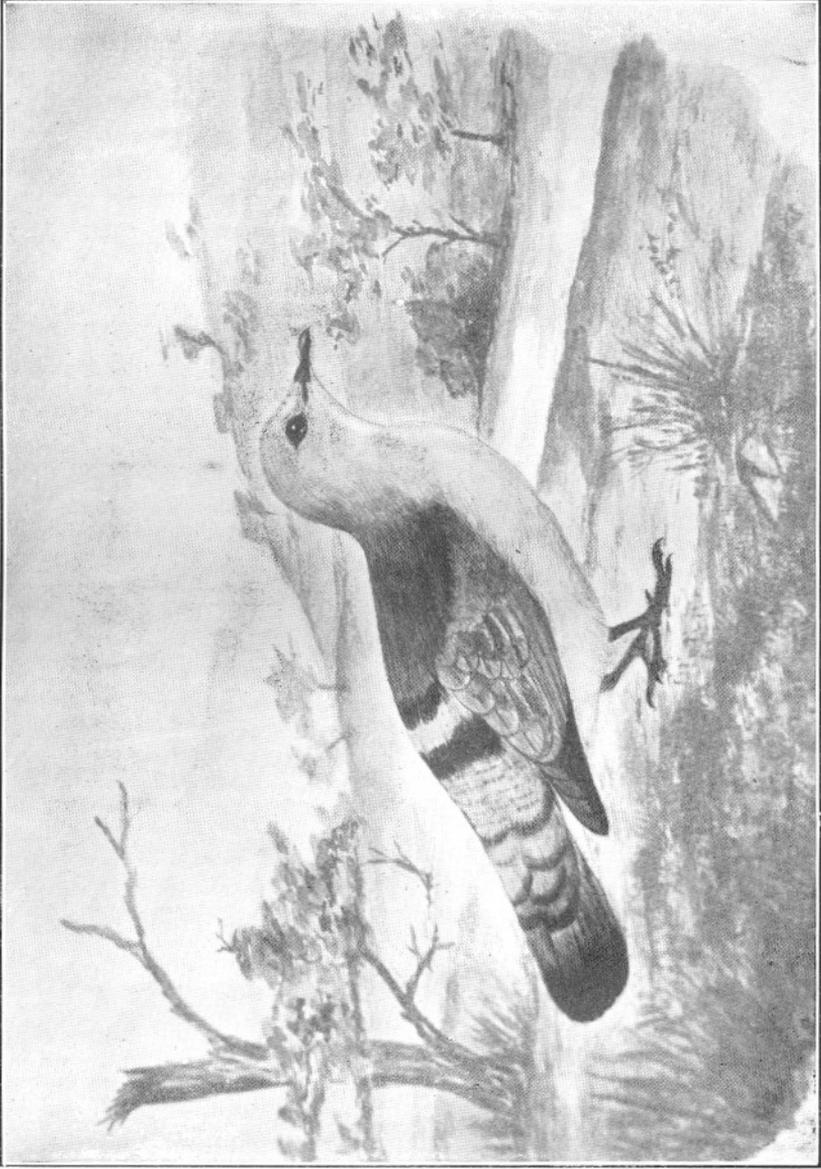
Type locality: Eastern Cape Province.

DISTRIBUTION:

In the dry thorn-bush and scrub country from the Coast to Victoria Nyanza.

DESCRIPTION: MALE, ADULT:

Forehead, cheeks and ring round the eye, very pale greyish becoming darker grey on the top of the head and shading to slatey-grey on the occiput. There is frequently a blackish line from the anterior angle of the eye to the gape. The throat is whitish shading to very pale pinkish on the sides of the neck and to darker vinous pink on the breast, this in turn shading to paler pink on the flanks and to white on the centre of the abdomen and vent. The pink on the sides of the neck shades into ashy-grey-brown on the hind-neck. The mantle scapulars and coverts and the innermost secondaries brownish-grey; the four innermost secondaries and the four inner secondary coverts each with a large subterminal metallic green spot on the outer web. All the primaries light cinnamon with narrow blackish edges and tips; while most of the secondaries are cinnamon with ashy-grey outer margins and ends. The primary coverts are cinnamon with blackish outer edges and tips. The under wing-coverts and axillaries are pale cinnamon. The back is greyish-brown, crossed by a narrow black bar; the rump is pale brownish grey crossed by a wide black bar; the upper tail-covert are pale grey-brown with black ends, forming



van Someren del.

TURTUR CHALCOSPILOS CHALCOSPILOS, Wagl.

a third bar. Most of the rectrices are grey at the basal $\frac{3}{4}$, with the terminal $\frac{1}{4}$ blackish; the three outer pairs are grey tipped, while the basal $\frac{3}{8}$ of the outer web of the outermost pair are white. The under-surface of the tail is black. The under tail-coverts are mostly black; the lateral feathers are white.

Eyes brown; bill crimson at base, tip black; legs and toes purple-madder. Wings 96-108 mm.

FEMALE:

Very similar to the male; but rather paler on the head and breast.

JUVENILE:

The first feathered plumage is very like that of *T. afra kilimensis*, but paler throughout, so that the blackish and dark barring is more conspicuous.

In the second plumage the barring is retained on the crown, breast and ends of the secondaries and secondary coverts, the latter having white tips; while the tips of the primaries are cinnamon. The remainder of the plumage is very like that of the mature bird but duller and paler, the feathers of the scapular and dorsal regions with pale buffy tips.

HABITS:

This beautiful little Dove with its soft delicate colouration is one of the features of the Coastal zone and the dry thorn-bush country. It is much more a bird of the desert scrub and wasteland than is *T. a. kilimensis*, and although very similar to it in habits, is much more timid and less sociable. In the Highlands it has become a feature of the coffee shambas, particularly those which are kept free from rank vegetation and weeds. One or two birds can usually be seen feeding between the rows of coffee trees. When once a pair has taken to frequenting a particular area of coffee, they remain in the vicinity for months, and indeed make use of actual trees to nest in. The upper branches of a coffee tree which has been pruned and topped makes an ideal nesting site and is most attractive to these birds. The food of these Doves consists mostly of minute seeds of weeds, with an occasional mollusc and insect. These birds are very fond of white ants, especially the flying forms of the smaller species.

Although feeding principally on seeds of weeds these birds are not adverse to taking small grain such as Whimbi, Mwele and Mecombe. They do not attack the standing grain but take the fallen seed from a plot that has been reaped or grain dropped in transit.

The Emerald-spotted Ground Dove does not occur in flocks but is met with singly or in pairs. When found near human habitations they are much tamer than in the bush country and with proper treatment can be induced to remain in one's garden for years. They

becoming exceedingly tame and confiding. Their call is low and plaintive and though somewhat like that of *T. a. kilimensis* is quite distinguishable even at a distance. It consists of two long and low coos, followed by two shorter coos, then a pause, then follow eight rapid coos in descending scale and diminishing tone.

These little Doves have a remarkably rapid flight, but seldom of long duration, in fact if they are put up suddenly they fly only a short distance and alight abruptly. Just before settling, in order to break the impetus of flight, they zigzag slightly and when they alight they rapidly raise and lower the tail and posterior part of the body, at the same time the tail is slightly fanned. The movement is actually an exaggeration of the similar habit found in the Blue-spotted Dove.

As has already been mentioned, these birds are very fond of nesting in low coffee trees and in the uncultivated areas one seldom finds a nest in any other but a low bush or tree. The nest itself is often quite exposed but sheltered above and is constructed of a few twigs and fine rootlets with no lining. It is a frail structure and very loosely put together. The eggs, two in number, are a very pale cream, almost white and measure 23-23.5 x 18 mm. We have records of nests found in January to July, and November and December, while young just from the nest have been seen in June and July.

The young remain with the parents until able to fend for themselves; they are then driven off.

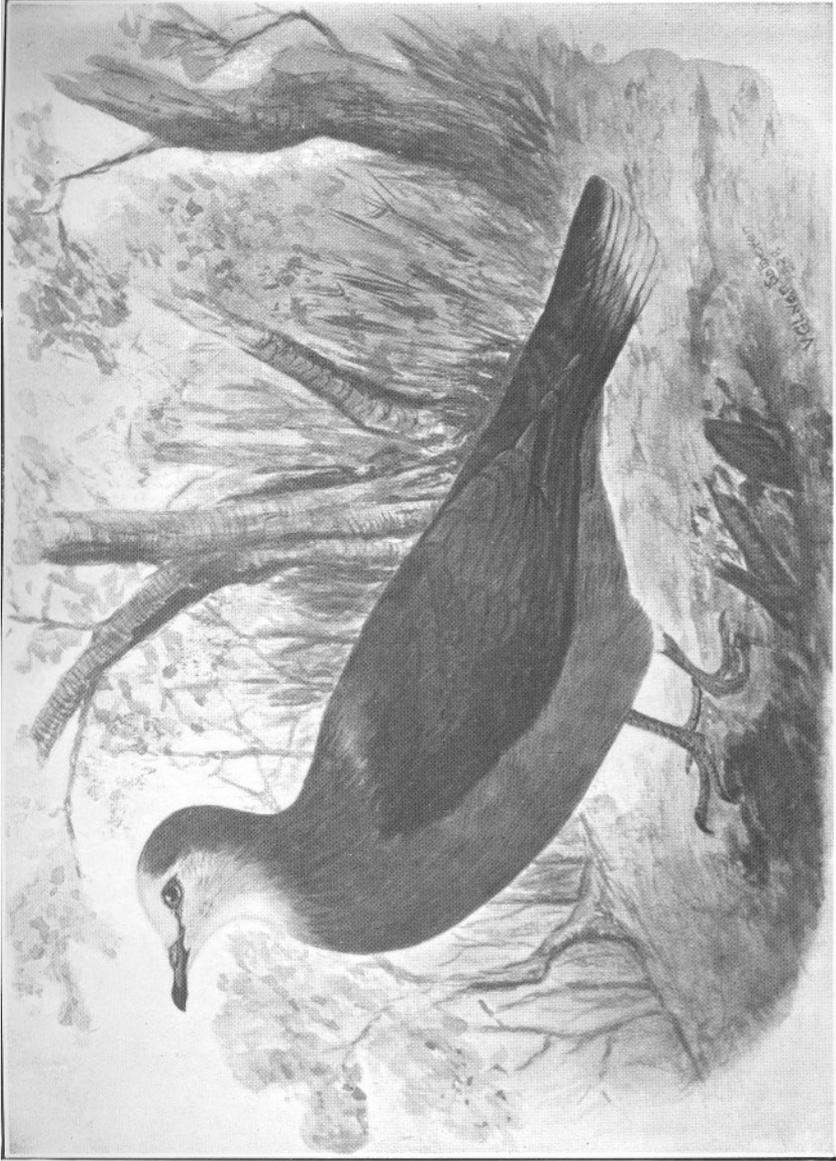
This little Dove makes an excellent aviary bird and if well looked after will nest readily. It is rather susceptible to change of feed and environment which is shown by a strong tendency to a form of melanism. In some of my specimens the primaries became a dark brownish black, all trace of the cinnamon colour being lost, while the mantle and wing-coverts not only became darker but the actual structure of the feathers changed; quite a number became metallic green, while those feathers which normally had a large metallic spot became entirely iridescent.*

Turtur abyssinica delicatula, Sharpe. Black-billed Blue-spotted Ground Dove.

Ref. Sharpe, Bull. B.O.C., Vol. XII., p. 84, 1902.

Type locality: White Nile.

*Foot Note.—Considerable controversy has recently arisen over the matter of the correct published names applicable to the two species of metallic-spotted Ground Doves. I have followed Sclater, *Bul. B.O.C.*, Vol. xlii., pp. 117, 118, May, 1922.



van Someren del.

APLOPELIA LARVATA LARVATA, Temm. & Knip.

DISTRIBUTION :

The extreme N.W. corner of the Nile Province of Uganda.

DESCRIPTION : MALE, ADULT :

Very like *T. c. chalcospilos*, but altogether paler especially on the breast and underside; these being a very delicate vinous pink. The fore-part of the head, including the throat almost white; the occiput and nape grey. The spots on the wing *iridescent metallic-blue*. The bill is uniform black, while the feet and legs are purply-red or madder.

HABITS :

In every way similar to the Green-spotted Dove. We have no record of its call or nesting habits. This is a bird of the Sudan which extends into Uganda just south of Nimule. We possess an adult female and an immature male taken at Nimule.

GENUS APLOPELIA, Bonaparte.

Aplopelia larvata larvata, Temm. and Knip. Cinnamon-breasted Forest Dove.

Ref. Temminck & Knip. Fig. Colombes, p. 71, 1810.

Type locality: Knysna, Cape Province, S.A.

DISTRIBUTION :

The forests of Kenya from Kilimanjaro to Mt. Elgon.

DESCRIPTION : MALE, ADULT :

Forehead to mid-orbital line white, shading to grey and grey-brown on the occipital region and nape, these areas with a violet-bronze reflection. Throat white, shading to pale ashy-grey, with pink bloom on the cheeks and ear-coverts. Back, sides and front of the neck violet-bronze with greenish reflections; mantle leaden-grey with purply-greenish tips to the feathers, those of the mid-scapular area being markedly green. Scapulars, wing-coverts, rump and upper tail-coverts glossy olive brown, slightly rufescent on the last area. Breast coppery-vinous-grey, shading into cinnamon on the lower breast, flanks, abdomen and under tail-coverts; the flanks slightly tinged with greyish. Primaries and secondaries, olive-brown with slight greyish sheen at tips, and edge of outer webs. Rectrices mostly blackish-brown with a wide grey tip; central and next pair uniform olive-brown with a tinge of brown on the outer web of the third pair. Wings 148-152 mm. Eyes claret or crimson; bill dark purply at base, black at tip; legs and feet purple madder or mauve; eyelids crimson.

FEMALE :

Somewhat like the male but slightly duller and darker on the breast and with the forehead tinged with grey.

JUVENILE :

The nestling plumage is a rufescent-brown ground colour rather more ochreous on the head and abdomen, more blackish on the mantle and wings, each feather with two or more blackish bars, those of the last two areas with rusty-brown tips. The throat is ochreous. In the next plumage the forehead and throat are ochreous, the former with blackish barring; the hind part of the crown is blackish narrowly barred with rusty brown; the hind neck and breast are rusty-brown with faint blackish barring, while the flanks and abdomen are dull cinnamon. The mantle, wings, rump and upper tail-coverts are dark olive brown, each feather with rusty-brown tips. This plumage soon merges into that of the adult, the first areas to change being the forehead, mantle and underside.

HABITS :

This Dove has a fairly wide distribution in Kenya being found wherever there are patches of forest of sufficient density to give it cover. The southern limit appears to be Mt. Kilimanjaro and the Taveta Forest; we have no records of its occurrence at the Coast. It is fairly common in the forests round Nairobi and Ngong, plentiful in the forests of Mt. Kenya, the Mau and Cherangani and not uncommon on Mt. Elgon which area appears to be its northern limits.

The Cinnamon-breasted Dove is somewhat rare in collections owing to the fact that it haunts the densest parts of its forest home and though it may possibly be flushed quite often, it darts into the undergrowth with such rapidity that it gives one little or no chance to shoot. The most successful way to observe these birds is to "bait" a spot likely to be frequented by them. There used to be a special spot in the Karura Forest where one could always be certain of flushing one or a pair of these birds. The area was low-lying and moist, with dense forest and rather thick undergrowth. There was however a certain tree in the middle of the spot to which the Red Duiker used to resort and use as a "rubbing post"; hence there was a well-worn track to the spot, and along it one could obtain an excellent view of the ground. The "baiting" of this ground resulted in unrivalled opportunities for close observation of the Doves, and other birds also. The ground was covered in a thick layer of damp leaf mould which yielded an abundance of small land molluscs, insects and seeds of various kinds, and it was on these that the doves were feeding. The birds seemed to quarter the ground systematically, turning up the leaves with the tip of the bill, often to a depth of two or three inches.

Most of the seed taken was small, black and polished, somewhat like linseed, but I was unable to trace from what plant they were derived. Seed taken from the crop and sown, did not germinate.

At certain times of the year the crops of these doves are full of small bulbous roots which have a high water content, and are sweet to the taste.

When walking on the ground these birds nearly always carry the tail above the wings. They feed mostly in the early mornings up to about 11 a.m., and then roost in some low bush under dense shade; the second period of feeding starts about three, but if there are young to be fed one may find them collecting food at any time during the day. I have never heard the call of these birds nor is there any published description of it. During the many occasions that I have watched them, the only note has been a low whee-u when the cock bird has approached near his mate.

Nests of this Dove have been recorded in March, May and June and young just out of the nest in August, May, and July. The nest has usually been in a small bush amongst thick undergrowth, but on one occasion we took it on a trunk of a large tree which had been blown down and from which a clump of young shoots were growing; the nest was built at the base of these shoots. The eggs are white and two in number, measuring 26 x 21 mm.

Before the Agricultural Department destroyed the patch of primeval forest at the foot of my garden, a pair of these Doves lived in it for more than three years and successfully reared two broods each year, but since the forest undergrowth was cleared, not a single nest has been found, though an occasional bird visits the spot from time to time.

Aplopella simplex jacksoni, Sharpe. Uganda Grey-breasted Forest Dove.

Ref. Sharpe, Bull. B.O.C., Vol. XIV., p. 93, 1904.

Type locality: Ruwenzori.

DISTRIBUTION:

Uganda. From Ruwenzori to the Mabira Forest.

DESCRIPTION: MALE, ADULT:

Throat and forehead very pale grey, the latter shading to slatey-grey on the crown. Nape, hind and side of neck bronzy-pink changing to bronzy-green on the mantle and scapulars, the mantle with a greyish sheen. Wing-coverts, primaries and secondaries, rump, upper tail-coverts and central pair of rectrices olive brown with a rufescent sheen. Remainder of rectrices with dark grey, terminal inch

light grey. Cheeks and lower-throat grey merging into bronzy-pink with greeny sheen on the breast; flanks dark-grey, abdomen light-grey shading to pale-grey or whitish on the under tail-coverts.

Eyes red-brown to purple madder; bill black; legs and feet dark-crimson to purple madder.

FEMALE:

Forehead and throat greyish; nape, mantle and scapulars with a bronzy sheen. Breast, abdomen, flanks and under tail-coverts vinous-greyish. Tail as in the male. Soft parts as for the male.

JUVENILE:

We have no specimen of the nestling plumage nor is there any published description. In the second plumage the fore part of the head to the lower throat are dirty-white cross-banded with rusty-brown. The nape to the upper tail-coverts are earth-brown with rusty-brown tips; the breast and flanks are rust-brown with blackish-brown barring. The abdomen and flanks and under tail-coverts are rufous.

HABITS:

This forest Dove is by no means common and although it has been recorded from most of the large forests of Uganda little is known regarding its general habits or nesting seasons. Jackson's native collector found the birds nesting in May, while my collection contains a quite young bird shot in December—probably a bird hatched in August. Like *A. larvata*, this species keeps to the thicker parts of the forest undergrowth, and owing to its dull colouration is extremely hard to detect; one usually becomes aware of the bird's presence by the sound of rapid flight with possibly just a glimpse of a dove-like form disappearing into a thicket. They are extremely shy and move off at the slightest noise. They are entirely ground feeders.

GENUS VINAGO, Cuvier.

INTRODUCTION:

The Genus *Vinago* is applied to a compact group of Pigeons with sexes alike which are characterised by very heavy hooked bills, with a varying length of cere or naked soft parts extending from the base of the horny tip to the commencement of the forehead feathers; by their comparatively short wings and their compact dense plumage which consists of varying shades of grey, green and yellow (hence the generally applied name—"Green Pigeon" or Green Fruit-Pigeon). They are near relatives to the Indian Treron and Osmotreron.

GROUP HABITS:

The popular name "Fruit Pigeon" has been applied to these birds on account of the fact that the bulk of their food consists of

fruit of various kinds, varying from the small black fruit of *Trema guineensis*, Ficalho, to a large plum-like fruit common in certain forests, or to the large fig of the *Ficus mallatocarpa*, Warb. Green-Pigeons of various species and geographical forms extend from the Coastal belt up to the forests of the highlands up to about 8,000 feet, and throughout Uganda. Though actually occurring in the forests, they are seldom met with in such but are much more plentiful and more in evidence in the more open park-like country where there are large trees with a predominance of fruit-bearing species or along timbered watercourses. They are not at all adverse to frequenting some particular fruit-bearing tree which may be growing in almost complete isolation in some open cultivated area, when the fruit season is on. Because of the great difference in the times when certain fruits and berries are in season in various localities, these birds have become great wanderers or local migrants. It is an undoubted fact however, that in a given locality where certain fruit trees come into bearing with regularity or fixed seasons that one can count on Green-Pigeons being there at that particular time. Their presence is thus governed largely by the food supply. There are however, in Kenya and Uganda, certain localities where the pigeons are present throughout the year, but in these particular areas their diet is not limited entirely to fruit; they have taken to feeding on standing green Maize and Mtama. There are two main periods at which these birds feed: early in the morning from about six to ten and again in the evening from four to six. Between times they rest, either sitting motionless or preening themselves. They sometimes rest in the food tree, but more often they leave their feeding grounds for some roosting place, possibly miles away. The general colour of these birds harmonises so completely with the foliage that it is well-nigh impossible to discern a sitting bird. One may know perfectly well that Green-pigeons are in a tree, but when one comes right under it and scans the branches not a bird is to be seen; presently however, a slight movement will direct one's attention to a certain spot, and on careful search perhaps one bird may be detected, a little later possibly two, three or more, all within a short distance of one another in the actual spot which one has been observing for some time. Green Pigeons are easily alarmed and if a tree, into which birds have been seen flying, is approached carelessly, out they go in the direction opposite to one, with a clatter of wings which is quite bewildering. Their flight is extremely strong and swift yet rather erratic; they are given to sudden alteration in height and direction. Birds which appear to be coming straight towards one will suddenly dip and ascend with such rapidity as to be quite disconcerting.

From the sporting point of view, Green-Pigeons are hard to beat; they offer a great variety of most difficult shots and if correctly

handled will maintain a fairly steady stream of coming and going birds so that the " bag " will be good. If the birds have already assembled at a feeding tree, it is inadvisable to blaze off too many shots at birds which have been disturbed at one's approach; the better plan is to take a right and left and then station the guns at some little distance on two sides of the tree and take the in-coming birds. If the shoot commences in the early morning, one can be certain that quite a number of birds will be induced to return to the tree time after time even when shot at, being compelled to do so by their almost insatiable appetites. Green-pigeons are most voracious feeders and will devour vast quantities of fruit; small yellow figs are swallowed whole, the elasticity of their gape is wonderful, and the size of the berries they swallow is considerable. What digestion these birds possess is very rapid; they evacuate masses of apparently half digested fruit as rapidly as they take in fresh food. With all their actual greediness they are extremely wasteful. One has only to sit beneath a tree in which a flock is feeding to realize the quantity of fruit which is " billed " and allowed to drop. These birds are wonderful climbers, their short strong legs and prehensile toes are used to great advantage; they will sidle along a very slender twig which bends with the weight of the bird, right up almost to its tip in order to secure some coveted berry at its extremity. Time after time I have watched a bird manoeuvring thus and when almost within reach of the desired fruit, suddenly swing over head foremost, but still grasping the twig, hang upside-down and secure the prize. Mention has already been made that in certain localities these Pigeons have taken to eating green Maize. This is particularly the case in parts of the Eastern Province of Uganda and in the Meru country in Kenya. I have observed the birds tearing open the fully formed but not ripened cobs and wrenching off the seeds. They only take those seeds which are still in the " milk " stage.

In the first mentioned locality, my " bird boys " succeeded in capturing quite a number of *salvadorii* in traps baited with green Maize.

Green-pigeons do very well in captivity, but they require an abundance of food. They will take such fruit as bananas, pawpaw, guavas, figs and such-like and a mixture of posho and boiled rice. They are rather sluggish when caged, even in big aviaries, and are thus less attractive than some of the small Doves. The plumage of these pigeons is influenced by captivity, especially if the aviary be very shaded and humid. Some of my captive birds became quite blackish all over, and remained so, so long as they were in a certain aviary, but after two moults in a bright sunny run they reverted to their normal colour. The food given to them remained the same,

thus one is led to think that it was entirely a matter of environment. Green-pigeons are rather quarrelsome birds in spite of being gregarious; one often sees them fighting over some special cluster of wild figs, but there is actually more vociferous display than actual force.

Only on one occasion have I seen these pigeons drinking in the wild state. They did not actually alight on the ground and drink at the water's edge but selected a branch of a tree which dipped into the running stream and sidling down this they stood almost upside-down and inserting half the head in the water took rapid gulps without withdrawing. My captive birds took their drink by hanging onto the wire netting above the water pot and stretching down to it.

These Pigeons are very susceptible to shock. Some of my captive specimens died through sheer fright; a sudden loud noise, or on one occasion the sudden appearance of a Genet cat which certainly did not actually touch a bird, caused two fine healthy males to drop off their perch and die instantaneously. I had twice experienced a curious thing when pigeon shooting which I could not account for until the above happened to my captive birds. There is a large fig tree just outside my study window which is much frequented by Fruit-pigeon when the berries are ripening; one day I shot a bird feeding well out towards the edge of a branch and as it fell another dropped almost at my feet having come from a branch at least ten feet away from the bird I fired at. This second bird did not have a single shot mark anywhere or even a graze. When I fired the shot I was well concealed and took the birds unaware so that the fright was a sudden one; death was undoubtedly due to shock. On another occasion two birds dropped dead out of a branch on the opposite side of a tree near which I took an incoming bird; both were untouched by shot as I had fired in the opposite direction.

Some of these pigeons always lay only one egg, in others the clutch is two. The nest is usually built in a low tree sometimes quite exposed. Both parents brood and are close sitters. Incubation lasts 14—16 days. Sometimes two or more nests may be found within a short distance of one another, but usually they are rather scattered.

Actual records of nests found will be given under the several species described.

Vinago waalla, Meyer. Grey-headed Yellow-bellied Green Pigeon.

Ref.: Meyer, Syst.-Sum. Uebers. Zool. Entdeck, p. 128, 1793.

Type locality: Lake Tsana.

DISTRIBUTION :

Uganda; Northern and Eastern Province. Kenya: Northern Frontier and Jubaland.

DESCRIPTION : MALE, ADULT :

Entire head, neck, upper mantle and upper breast blue-grey with a slight olive-green wash; remainder of mantle, scapulars, back, rump and upper tail-coverts pale olive-green; bend of wing, most of the lesser and outer median coverts purply-grey, the outer median coverts edged with bright yellow. Primary coverts black; secondary coverts: outermost black, inner ones shading to olive, all widely edged with bright yellow. Most of the secondaries grey-black, innermost olive, all narrowly edged with pale yellow. Primaries blackish with very narrow whitish margin to outer webs. Breast and centre of abdomen bright yellow fading to white on the ventral area and to olive-grey and white and grey on the flanks. Under tail-coverts broadly buffy-white on the outer webs, inner webs pale chestnut: the shorter feather olive-grey basally and on inner webs. Under wing-coverts, axillaries and undersurface of the wing, grey. Under side of tail grey-black distally tipped with light-grey; upper side of rectrices, mostly dark grey basally, distally light grey, two central pairs uniform grey. Eyes violet and blue or red and blue; Bill, tips horn bluish-white, base maroon; legs and toes lemon-yellow. Wings 170-185 mm.

FEMALE :

Rather like the male but smaller and duller.

JUVENILE :

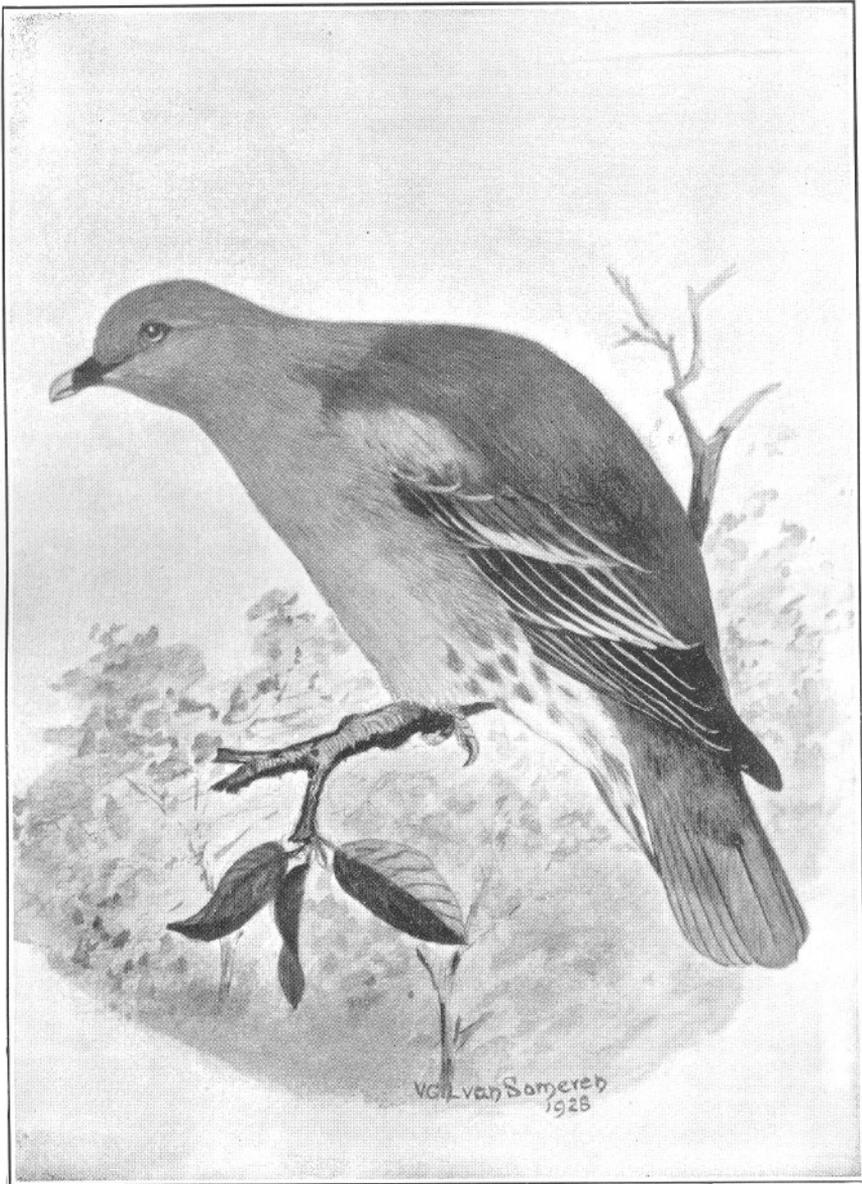
The nestling plumage is superficially like the female but is greener on the head; lacks all trace of purple on the wings and the upper breast is dirty greenish while the lower breast is dirty yellowish.

In the next plumage the yellow appears on the lower breast and there is a trace of purple on the "shoulder". The head and neck are olive-grey.

HABITS :

This very fine Fruit Pigeon is apparently limited to the more northern and eastern districts in Uganda and to the drier parts of Kenya and Jubaland.* It frequents areas in these localities where there are plenty of trees, not amounting to forest, such as the park-like country and timbered river-beds. Very few are strictly resident, most are local migrants, their appearance in a given locality coinciding with the ripening of some particular fruit or berry. They are especially fond of the various species of small wild fig and when these are in season large flocks gather together and clear up the whole crop of fruit in a few days.

* Birds from Jubaland probably represent a distinct race.



van Someren del.

VINAGO WAALIA, Meyer.



van Someren del.

VINAGO CALVA BREVICERA, Hartert & Goodson.

Vinago calva salvadorii, Dubois. Uganda Green Fruit Pigeon.

Ref.: Dubois, Proc. Zool. Soc. 1897, p. 784.

Type locality: Western shores Lake Tanganyika.

DISTRIBUTION:

Throughout Uganda east to Elgon and to the Mau in Kenya.

DESCRIPTION: MALE, ADULT:

Entire head, neck, and breast yellowish-olive-green becoming yellowish on the upper abdomen then white at the vent; flanks greyish-olive. Lower part of hind-neck with a blue-grey band which shades into the greyish-olive of the mantle, back, rump and upper tail-coverts. Bend of wing purply-grey shading into the greyish-olive of the coverts; the outer median, and the secondary coverts with pale yellow edges on the outer webs. Primaries and secondaries black with narrow yellow edges; primary coverts black. Undersurface of wing, under wing-coverts and axillaries grey. Rectrices on the upper side grey with a terminal band of lighter grey, the central pair almost uniform grey; on the underside the tail is blackish with a terminal bar of whitish-grey. Long under tail-coverts pale cinnamon with buff tips and outer edges, rest whitish with olive centres. Thigh feathers with dark gery-olive centres and white margins; leg feathers canary yellow.

Eyes with an outer ring of red to lilac, inner ring blue; bill horn-blue-grey at tip or whitish, soft part and nostrils coral red or deep orange red; 12-14 mm.; feet coral red. Wings 165-178 mm

FEMALE:

Like the male, but usually smaller.

JUVENILE:

Unknown to me.

HABITS:

See introduction.

Vinago calva brevicoera, Hartert and Goodson. Kenya Green Fruit-Pigeon.

Ref.: Hartert and Goodson, Nov. Zool. xxv, p. 353, 1918.

Type locality: Moshi, Kilimanjaro.

DISTRIBUTION:

Kenya from Taveta, through Ukambani to the Northern Guasso Nyiro, Kenia and N.-W. to Sotik where it meets the Uganda form.

DESCRIPTION:

Entire head and neck and upper breast yellowish-olive green, (more yellowish than in *V. c. salvadorii*.) becoming yellower on the lower breast and centre of abdomen, and greyish tinged with greenish on the flanks. Between the lower hind-neck and the mantle is a clearly defined blue-grey band which merges into the greyish-olive of the mantle, scapulars back, rump and upper tail-coverts. Lesser wing coverts at bend of wing purply-grey, remainder of the wing-coverts like the mantle; secondary and outer median coverts with wide yellow margin; primary coverts black; primaries and secondaries black with wide yellow edges to the former and narrow ones to the latter. Under-surface of wings axillaries and under wing-coverts pale grey. Thigh feathers centrally olive grey with whitish margins; leg feathering canary yellow. Under tail-coverts: lateral short ones pale olive grey with white ends, long feathers pale cinnamon with buffy-white tips and margins. Under surface of tail dark grey with pale greyish-white terminal band; upper surface pale leaden-grey with terminal inch very pale greyish-white washed with, and tinged greenish on outer webs. Eyes blue to silvery with outer ring of lilac; bill horn blue at tip *yellow or cadmium yellow* at the cere and nostrils, the bare area seldom exceeding 7 mm. Legs and feet coral red or red-madder. Wings 160-179 mm.

FEMALE:

Like the male but smaller.

JUVENILE:

The nestling has the crown, hind neck, mantle and wings pale olive grey with large pale yellow edges to the outer webs of the median and secondary coverts, yellow edges to the primaries and secondaries; rump pale greyish-olive; tail pale-grey with paler tips; throat almost bare, breast and abdomen covered in pale greyish down with just a tinge of green on the breast; under tail-coverts pale buff. Bill swollen laterally yellow ochre, grey tipped; Eyes ochre yellow; Feet yellow-brown.

From this stage the moult into the full feathered plumage is rapid and similar to that of the female.

HABITS:

The general habits of this race are similar to those of the rest of the group. We have records of their nests from March to July and in November to January. The nest is built in rather low trees, seldom more than 18 feet up. It is of the usual pigeon type, built entirely of thin twigs. The clutch varies from two to one egg; but whether the latter is actually the full clutch is difficult to say. We have frequently shot females with two ova almost ready to be laid, but with equal frequency, nests are found containing only one hard-sat egg. As the nest is a very shallow structure it is conceivable that one egg

gets knocked out as the parents leave the nest in a hurry. The call of this bird is a musical whistle ending in a double note; somewhat like "whit churu, whit churu, whit, tock tock" the last two several notes lower than the rest. The call carries quite a distance and is frequently the first indication of the birds presence.

Vinago wakefieldi wakefieldi, Sharpe, Wakefield's Green-tailed Green Pigeon.

Ref.: Sharpe, Proc. Zool, Soc. 1873, p. 715.

Type locality: Mombasa.

DISTRIBUTION:

The coastal zone of Kenya, with extensions inland along the Tana and Juba and the Usambara Range.

DESCRIPTION: MALE AND FEMALE ADULTS:

Very similar to *V. c. brevicera*, in general colour but differs from that species and other races of *calva* in having the upper surface of the rectrices olive-green with the terminal inch greenish-white. The grey band between the lower neck and mantle is not so pronounced and the purple wing-patch is mixed with grey distally. The eyes are white or cream; the bill is horny-grey at the tip and the basal cere is orange-red to coral-red; the feet are coral-red. Wings, 149-165 mm.

JUVENILE:

As in *V. c. brevicera* but tail greenish.

HABITS: See introduction.

Vinago delalandii granti, van Som. Delaland's Coastal Green-Pigeon.

Ref.: van Someren, Bull. B.O.C. XL. p. 20, 1919.

Type locality: Kilwa, T.T.

DISTRIBUTION:

The southern end of the coastal zone, being an extension into Kenya from the Pangani area of Tanganyika Territory.

DESCRIPTION: MALE AND FEMALE:

Head, neck and upper breast ashy-olive shading to greyish-olive on the lower breast, and to dark olive grey on the flanks. The abdomen and the vent are yellow. The thigh feathers are dark olive-grey edged with white; the leg feathers are yellow. The lower hind-neck is slightly greyish but not sharply differentiated from the mantle. The mantle, back, rump and upper tail-coverts are golden olive, lacking the soft

bloom found in *wakefieldi* and the races of *calva*. Most of the lesser wing-covert are golden-olive, except those at the " bend " of the wing, these are dark-greyish at the edge and dark-greyish-purple inwardly. The primaries and secondaries are black with narrow pale yellowish-white edging to the outer webs. The primary coverts are black, while the secondary coverts are dark-greyish olive merging to blackish towards the margin of the outer webs, and edged with yellow. The rectrices are mostly yellowish-olive; the outer pairs shaded with blackish on inner webs, all except the two central pairs, with pale greenish-grey terminal bars. The under tail-coverts are similar to those of other Green Pigeons. The eyes are pale blue with a whitish inner ring; the bill is bluish-grey at the tip with an orange-red basal cere; the legs and feet are orange-red to coral-red.

JUVENILE:

Unknown to me.

HABITS:

Very similar to the other Green-Pigeons, vide introduction.



van Someren del.

VINAGO DELALANDII GRANTI, van Someren.