# PIGEONS AND DOVES

#### Order COLUMBIFORMES

OF this order also only two species can be said to be regular denizens of open country and as such are here figured. Three other species are not unfrequently met with away from the jungle, especially near the sea-coast. They are therefore here described but will also be included in the volume devoted to Game and Sporting Birds.

In the Malay Peninsula, as a whole, about twenty species of pigeons and doves are found, of which two, strictly confined to the high mountains, are as yet known from nowhere else.

The following brief characters will serve to define the order as represented in Malaya:

Bill, with a swollen hard tip and a soft basal portion (the cere) on which the nostrils, which are covered with an operculum, open. Legs, covered with hexagonal scales, generally feathered on the upper part; toes, always four, on the same level, the soles in some species much broadened. Tail feathers, varying in number from twelve to twenty. Plumage, always thick, the shafts of the body feathers much broadened.

Monogamous in habit, pairing for a season, or possibly, in some cases, for life. Nest very simple, consisting merely of a few small sticks, loosely placed together in a tree or shrub. Eggs, one or two to the clutch, white, or occasionally slightly tinted, and usually glossy in texture. Young, hatched naked, remaining in the nest for a long time and fed by the parents with a partially digested regurgitated secretion from the crop. Entirely vegetarian, feeding on seeds or fruits, which are sometimes swallowed whole, and of extraordinary size for the bird.

The order is cosmopolitan in its distribution, occurring everywhere, with the exception of the circumpolar regions. Over six hundred species and subspecies have been described.

### KEY TO THE SPECIES HERE DESCRIBED

|  | With green in the plumage    | • | • | 2 |
|--|------------------------------|---|---|---|
|  | With no green in the plumage | • | • | 4 |

|    | Green plumage, metallic in character;                      |                                      |
|----|--|--------------------------------------|
| 2. | confined to upper surface                                  | Chalcophaps 1. indica, p. 12         |
| 4  | Green plumage never metallic; lower sur-                   |                                      |
|    | face, always with some tinge of green                      | 3                                    |
| ο. | Wing nearly 6 in. in length                                | Treron vernans abbotti, p. 9         |
| 3  | Wing nearly 6 in. in length Wing less than 5 in. in length | Treron olax olax, p. 11              |
|    | Feathers of the hind neck with bifurcate                   |                                      |
|    | tips, checquered black and white;                          |                                      |
| 4  | flanks unbarred  | Streptopelia chinensis tigrina, p. 7 |
|    | Feathers of the hind neck, normal; flanks                  |                                      |
|    | with narrow black bars                                     | Geopelia striata striata, p. 8       |

## Streptopelia chinensis tigrina

### The Malay Spotted Dove

PLATE I (left-hand figure)

Columba tigrina, Temm. and Knip, Pigeons, i., 1808-1811, pl. 43 (Batavia). Turtur tigrinus, Blyth, Journ. Asiat. Soc. Bengal, xv., 1846, p. 372; Kelham, Ibis, 1881, p. 528; Oates, in Hume's Nests and Eggs Ind. Birds (2nd. ed.), ii., 1890, p. 356; Robinson, Journ. Fed. Malay States Mus., i., 1905, p. 57.

Spilopelia tigrina, Oates, Cat. Birds' Eggs, Brit. Mus., i., 1901, p. 98. Streptopelia suratensis tigrina, Stuart Baker, Indian Pigeons and Doves, 1913, p. 209, pl. 21.

Malay Names.—Merbok, ketikir, tekukor jerum: nok khao fai (Siamese).

**Description.**—Adult.—Sexes similar. Head lavender-grey, more vinaceous at the back; feathers of the neck and nape, black, bifid at the tips, with a white spot on each side, causing a checquered appearance. Rest of the upper parts earthy grey, the feathers with paler tips, those of the mantle, the scapulars, tail and wing coverts, with broad blackish shaft stripes. Primaries, secondaries and primary coverts, blackish brown, the outer median series, greyish on their outer webs; lesser inner wing coverts, near the edge of the wing, grey, the rest and the axillaries blackish. Middle tail feathers uniform brown, the next pair blackish brown, the third pair broadly tipped with grey and the three outer pairs with a broad terminal band of white. Beneath, chin whitish, throat, chest and breast, clear vinaceous, washed with fulvescent, the centre of the abdomen whitish, under tail coverts white.

*Immature*.—Duller and browner above, with the checquering of the nape and sides of the head much less clear and distinct, or almost absent.

**Soft Parts.**—Iris, orange or pinkish yellow; orbits, dirty-white; bill, dark blackish horn; feet, dull lake.

**Dimensions.**—Male: total length, 12 in.; wing, 5.75 in.; tail, 5.5 in.; tarsus, 1 in.; bill from gape, 0.87 in. Females: are perhaps slightly smaller.

Range in the Malay Peninsula.—Throughout the Peninsula in suitable localities. Islands of Salanga (Junk Zeylon), the Langkawi group, Penang and Singapore.

**Extralimital Range.**—From Manipur and Burma, throughout Indo-China and the Indo-Malayan Archipelago to Celebes, Timor and the Moluccas, varying slightly in the south-eastern part of its range.

Nidification.—There is little definite information about the breeding season, which, as in Burma and Tenasserim, is probably at almost any time of the year, but mainly in the first half. The nest is of the usual fragile type common to the family, and consists merely of a few sticks. It is placed in a low tree or bush, often quite close to the ground, while nests have occasionally been found actually on the ground. The eggs are two in number, white and very glossy, and average, according to Oates, 1'15 by 0'85 in.

Habits.—The Malay spotted dove is very common throughout the Malay Peninsula, more so in the north and east than in the south and west; never in old jungle or on the hills, or in the mangrove zone. It affects open country and sandy plains where there are patches of short grass, surrounded by bushes, but also occurs in ricefields with trees surrounding them. Its food is grass and other seeds, picked up from the ground in the early morning and afternoon. During the heat of the day it lies up in low trees in secondary jungle near its feeding-grounds. It is usually found in pairs, but flocks of six or seven or even more occur. The note is a low musical coo, generally three or four times repeated, like that of the common domestic turtle dove. It is a favourite cagebird with Malays and Chinese, and is seen in almost every village.

# Geopelia striata striata

#### The Barred Ground Dove

PLATE I (right hand figure)

Columba striata, Linn., Syst. Nat., i., 1766, p. 282 (East Indies).

Geopelia striata, Jerdon, Birds India, iii., 1864, p. 486; Kelham, Ibis, 1881, p. 528; Blanford, Faun. Brit. Ind., Birds, iv., 1898, p. 52; Oates, Cat. Birds' Eggs, Brit. Mus., i., 1905, p. 56; Robinson, Journ. Fed. Malay States Mus., i., 1905, p. 56; Stuart Baker, Indian Pigeons and Doves, 1913, p. 254, pl. 26.

Malay Names.—Merbok, tekukor, balam: nok khao cha wah (Siamese).

**Description.**—Adult.—Sexes similar. Crown to level of the eyes, French grey; hinder head, earthy grey. Sides of the neck barred black and white, the white with a brownish tinge on the nape. Rest of the upper surface earthy brown, each feather tipped with black, more broadly so on the mautle and wing coverts, the ground-colour of the greater wing coverts much paler. Primaries, secondaries and primary coverts dark brown, the two former narrowly edged with whitish on the outer webs, and broadly so with pale chestnut on the inner webs towards the base. Under wing coverts barred chestnut, fulvous and black. Beneath, chin, throat to the midd'e, and sides of the head, French grey; middle of the breast, vinous; rest of the under surface creamy white, the flanks and thigh feathers obscurely barred with brownish black; under tail coverts, white. Middle pair of tail feathers, brownish grey, next two pairs, blackish brown, remaining four pairs, blackish, with broad white tips, the white more extensive on the outer web.

*Immature*.—Barring much more abundant, above and below, spreading right across the vinous of the breast, which is less clear.

**Soft Parts.**—Iris, whitish; orbits, silvery verditer; cere, silvery blue; bill, pale horn; feet, dark maroon.

**Dimensions.**—Male: total length, 9 in.; wing, 3.9 in.; tail, 4.2 in.; tarsus, 0.78 in.; bill from gape, 0.65 in. Females: possibly slightly smaller.

Range in the Malay Peninsula.—Throughout the whole length of the Peninsula. Islands of Salanga (Junk Zeylon), Penang and Singapore.

**Extralimital Range.**—Southern Tenasserim and Siam, through the Indo-Malayan Archipelago to the Philippines, Celebes and Amboina. Not in the lesser Sunda islands, east of Lombok. Introduced into the Mascarene islands.

**Nidification.**—The breeding season in the Peninsula appears to be in the earlier part of the year. The nest is made in bamboo hedges and bushes, but little above the ground, and consists merely of a few sticks loosely put together. Two eggs are laid, white in colour, only slightly glossy, and regular ovals in shape; they average o 87 by o 65 in., though two from Kuala Lumpur measure o 96 by o 73 in.

**Habits.**—Found abundantly in open spaces throughout the Peninsula, though never in old jungle or swampy country. Very numerous in gardens and on lawns; usually in pairs, but occasionally in parties of four or five. The food is almost exclusively grass seed, though Chinese market-gardeners complain of the damage done to their vegetables, both by this and the preceding species. The note is a "kok-kūrr-kūrr," softly repeated several times while the birds are bowing and scraping to each other. The barred ground dove is a favourite cage-bird among Malays, and high prices are paid for "lucky" birds—luck or the reverse being diagnosed by counting the number of scales on the toes.

*Note.*—The artist has portrayed our bird on a branch; it should be mentioned, however, that it is but rarely seen off the ground, and seldom perches at any elevation.

### Treron vernans abbotti

#### The Pink-necked Green Pigeon

Osmotreron vernans (auct.), Kelham, Ibis, 1881, p. 526; Salvadori, Cat. Birds, Brit. Mus., xxi., 1893, p. 60; Oates, in Hume's Nests and Eggs Ind. Birds (2nd ed.), 1890, ii., p. 375; ib. Cat. Birds' Eggs, Brit. Mus., i., 1901, p. 83; Stuart Baker, Indian Pigeons and Doves, 1913, p. 59.

Dendrophassa vernans abbotti, Oberholser, Journ. Acad. Sci. Wash., xiv., 1924, p. 298 (Trang).

Malay Name.—Punai.

**Description.**—Adult malc.—Top and side of the head, ear-coverts, chin and upper throat, pale French grey; occiput, nape, sides of the neck and breast, pale vinaceous, with a purplish tinge; a large ochreous-orange patch on the breast. Upper mantle, grey; lower mantle, back, rump and wing coverts, green, washed with grey: upper tail coverts, greyish fulvous, tinged with gold. Abdomen, green, the middle pale sulphur-yellow, sides darker green

mixed with grey. Flanks and vent mingled olive-green and pale yellow, the tilial plumes mainly lemon-yellow. Under tail coverts reaching to the tip of the tail, chocolate, the outermost tipped with cinnamon-buff. Primaries, outer secondaries and primary coverts black, the outer primaries faintly beaded with yellowish white, the inner secondaries and tertials and wing coverts, green; the greater wing coverts and tertials broadly edged with pale yellow, forming a bar on the wing. The wing lining, under wing coverts and axillaries, lead-grey. Tail feathers above, grey, with a black subterminal band, broadening towards the outer feathers, and with a narrow grey tip, almost obsolete on the centre pair. Aspect of the tail beneath, blackish, with a narrow grey tip.

Adult female.—No grey, vinaceous purple, or orange in the plumage. General colour, green, more yellowish on the breast, forehead and sides of the head. Under tail coverts, buffy white on the outer webs, pale cinnamon-buff on the inner, freckled towards the base with greyish.

Young male.—Like the adult female, it first gradually assuming the special plumage of the adult male which is probably not completely acquired until the middle of the second year. Lesser upper wing coverts and tertials edged with pale sulphur-yellow.

Young female.—A half-grown female has the upper tail coverts like the back and the feathers of the upper surface and the wing coverts broadly edged with buff.

**Soft Parts.**—Iris, yellow, with an orange ring round the pupil; bill, bluish horn, paler at the tip; feet, deep lake-pink. Of Sumatran birds Jacobson notes that in the male the iris is purplish red, fading soon after death to creamy yellow, in the female, orange.

**Dimensions.**—Male: total length, 10.5 in.; wing, 5.75 in.; tail, 3.9 in.; tarsus, 0.78 in.; bill from gape, 0.75 in.; Female: total length, 9.7 in.; wing, 5.5 in.; tail, 3.5 in.; tarsus, 0.75 in.; bill from gape, 0.7 in.

Range in the Malay Peninsula.—Universally distributed over the whole length of the Peninsula and on nearly all the adjacent islands, even the smallest.

**Extralimital Range.**—South Tenasserim, Siam and French Indo-China; the larger islands of the Malay Archipelago, east to Sumbawa; Celebes and the Philippine Islands. The species, however, has been divided into many local races or subspecies of varying distinctness.

Nidification.—This pigeon makes the usual fragile nest of sticks in small trees and shrubs, not infrequently only three or four feet above the ground. The breeding season is from January onwards, and is largely dependent on the fruiting of certain species of figs. It is possible that two broods are reared. I obtained hard-set eggs on Koh Pennan, on 27th May, and there are eggs in the British Museum from Kussoum on the mainland, near Junk Zeylon, dated 7th July. One or two eggs constitute the clutch. They are regular ovals, white, with very little gloss. Baker gives the average dimensions as 1 o8 by 0 85 in., those in the British Museum collection being very similar in size.

Habits.—The pink-necked green pigeon is by far the commonest of its genus in the Malay Peninsula, and the most widely distributed. It prefers

the coastal districts and is not found at any height on the hills except as a quite occasional visitor, nor does it occur in high or heavy jungle, where its place is taken by the much larger bird, *Butreron capelli*. (The large thick-billed green pigeon, Malay *Lengkwa*.)

During the breeding season it is found in pairs or small parties of five or six, but when that is finished the species congregates in large flocks, which may amount to many hundreds of individuals. On the coast they roost among the mangroves, and when flighting to and from their feeding-grounds in the early morning and late afternoon afford magnificent shooting. The food is largely figs and other similar fruits, but the birds are exceedingly fond of the sticky fruits of the shrub commonly known as the Straits Rhododendron, a species of Melastoma belonging to the family Melastomacea. The note is a double whistling coo, the second note much prolonged, and is quite different to the booming sound made by the larger imperial pigeon, or by the white nutmeg pigeons.

### Treron olax olax

### The Little Green Pigeon

Columba olax, Temm., Pl. Col., 241, 1823 (Sumatra).

Treron olax, Kelham, Ibis, 1881, p. 525.

Osmotreron olax, Salvadori, Cat. Birds, Brit. Mus., xxi., 1893, p. 64; Robinson, Journ. Fed. Malay States Mus., i., 1905, p. 53.

Malay Name.—Punai siul.

**Description.**—The smallest species of the group.

Adult malc.—Head and neck all round, mantle, rump and upper tail coverts, lead-grey, lightest on the chin and forehead, darkest, with a tinge of green, on the upper tail coverts. Lower mantle and upper back and lesser wing coverts, purplish maroon. Feathers of the angle of the wing, dark slaty. A broad orange patch across the breast; abdomen, yellow-green; sides, slaty; flanks, tilial plumes and vent, mingled grey, dark green and chocolate-buff. Under tail coverts, nearly reaching to the end of the tail, chocolate. Wing, black, the median and greater wing coverts broadly edged with pale yellow, the primaries and secondaries narrowly beaded with the same colour on the outer web. Wing lining under wing coverts and axillaries, dark slaty-grey. Tail, slaty black, with an apical pale grey band, palest beneath, and hardly visible on the upper surface of the middle pair of tail feathers.

Adult fcmale.—Crown, lead-grey; general colour above, dark olive-green; tail as in the male, but the middle pair of feathers strongly, and the others faintly, washed with olive-green. Under surface, dull green, brighter on the breast, and greyer on the throat. Flanks, mingled buffy and dark green; tibial feathers, pale buff; under tail coverts, pale cinnamon-buff, with dark green bases and greenish black centres.

**Soft Parts.**—Iris, outer ring, terracotta-red; inner, white; bill, yellowish green; feet, bright coral.

**Dimensions.**—Male: total length, 8.25 in.; wing, 4.8 in.; tail, 3.1 in. Female: total length, 8 in.; wing, 4.75 in.; tail, 2.9 in.

Range in the Malay Peninsula.—From Junk Zeylon (Salanga) to the southern extremity of the Peninsula. Sparingly in Penang and Singapore islands.

**Extralimital Range.**—Borneo, Sumatra, Java, the Rhio Archipelago. Minute differences are alleged to occur between the birds from the different islands.

Nidification.—Not recorded in the Peninsula.

Habits.—This little fruit dove is not nearly as common as *T. vernans abbotti*, living as a rule in more thickly forested districts, and not flighting to anything like the extent, and in much smaller parties—rarely exceeding seven or eight individuals. It is found at some height on the hills, and with two or three other species of fruit pigeons appears to perform limited migrations at night, as at the end of February 1904 specimens were captured at night at the Semangko Pass, between Selangor and Pahang, height, 2700 ft. The food is mainly the fruit of jungle figs, and when such a tree is in full fruit this bird and many others collect on it in large numbers. The note is a soft whistling coo, rather like that of *T. vernans*, but softer.

I have included this species in the present section as, on occasion, it is not uncommon in gardens. At one time it frequented the Public Gardens, Kuala Lumpur, in considerable numbers, but has become rare of late years.

# Chalcophaps indica indica

## The Bronze-winged or Emerald Dove

Columba indica, Linn., Syst. Nat., i., 1766, p. 284.

Chalcophaps indica, Kelham, Ibis, 1881, p. 538; Oates, Birds, Burma, ii., 1883, p. 297; id. in Hume's Nests and Eggs Ind. Birds (2nd ed.), ii., 1890, p. 363; Blanford, Faun. Brit. Ind., Birds, iv., 1898, p. 26; Oates, Cat. Birds' Eggs, Brit. Mus., i., 1901, p. 103, pl. 7, figs. 2, 3; Robinson, Journ. Fed. Malay States Mus., i., 1905, p. 56; Stuart Baker, Indian Pigeons and Doves, 1913, p. 121, pl. 11.

Malay Names.—Punai tana, punai dekut, lembok.

**Description.**—Tail short, wing long and pointed. Tarsi long and slender, soles not broadened. Plumage partly metallic. Sexes different.

Adult male.—Forehead and superciliaries, bluish white, becoming lead-grey on the crown, behind the level of the eye, and nape. Sides of the head, upper mantle and under surface, purplish vinous, greyer on the flanks and belly, and with a blue-grey bloom on the mantle. Back, dark metallic bronzy green, with two grey bands, rump and upper tail coverts black, the bases of the feathers dark grey. Base of mantle, scapulars, tertials, and lesser and median wing coverts, bronzy emerald-green, the feathers at the angle of the wing with broad white edges, forming a conspicuous patch. Primaries, primary coverts and outer secondaries, blackish brown, their inner webs chestnut

towards the base; outer webs of the inner secondaries, bronzy green. Inner aspect of flight feathers, chestnut, the lesser under wing coverts, rufous chestnut, the greater coverts and axillaries, greyish, freckled with chestnut. Tail, black, with bronzy reflections in old birds, the outer feathers grey at the base, with a narrow grey tip.

Adult female.—Forehead and supercilia, greyish white; occiput, nape and mantle, ochreous brown; under parts, reddish brown, with no purplish or vinous tinge, sometimes freckled with greyish. Feathers at the angle of the wing, brownish chestnut, with grey edges in old birds. Longer upper tail coverts, brownish at the bases, the under tail coverts, grey, the largest, chestnut or blackish brown. Two median pairs of tail feathers, brownish black, the next two pairs largely suffused with rufous chestnut. Remaining plumage as in the male.

Immature.—Young males at first resemble the female. Quite young birds have no white at all on the forehead, and are irregularly barred with rufous and brown beneath. No trace of white or grey margins to the coverts at the angle of the wing. Metallic portions of plumage duller and less emerald.

**Soft Parts.**—Iris, dark brown; bill, coral-lake at the base; feet, dark purplish red; claws, yellowish horn.

**Dimensions.**—Male: total length, 10 in.; wing, 5.9 in.; tail, 3.6 in.; tarsus, 1.05 in.; bill from gape, 0.88 in. Female: total length, 9.5 in.; wing, 5.6 in.; tail, 3.4 in.; tarsus, 1.0 in.; bill from gape, 0.82 in.

Range in the Malay Peninsula.—Throughout its entire length and on practically all the adjacent islands.

Extralimital Range.—The greater part of India through the Indo-Chinese countries to South China and the Philippines. The Malay Archipelago to Western New Guinea. The form inhabiting Christmas Island, *Chalcophaps i. natalis* is slightly different, but over the rest of its immense range local variation is almost lacking.

Nidification.—The nesting season in the Malay Peninsula is in the earlier portion of the year, and it is probable that there are two broods. I have not myself obtained nests, which, according to Stuart Baker (op. cit.), are more elaborate than is usual in the family, being saucer-shaped structures, composed of roots, grass and dead and living twigs, placed in bushes or saplings a few feet from the ground. The eggs are not white, but very pale cream or buff, which is very unusual in the family, highly glossy, and average I o8 by 0.82 in. in size; two are laid.

Habits.—Though this is a jungle bird, it is so common and widespread throughout the Peninsula that I have included it in the present fasciculus. At one time, indeed, and not so long ago, it was common in Kuala Lumpur town limits. It occurs almost everywhere in jungle, old and secondary, from sealevel to over 4000 ft., though it is scarcer at the higher elevations. For choice it affects damper situations and cool dark ravines, and the banks of jungle streams, where it is found singly or in pairs, though occasionally in small parties of up to six or seven. It is mainly terrestrial in its habits, and when flushed does not travel far. Its flight though not high is rapid and powerful. At night

it roosts in trees at some height from the ground. It feeds mainly on seeds and berries, but also on ants and termites. The note is a low and musical coo, and the bird, which is readily domesticated and excellent for the table, though sometimes rather dry, is trapped in large numbers by the use of a bamboo callpipe some six or eight feet in length (dekuk punai), with a noose attached, the hunter concealing himself in a small conical hut camouflaged with branches and leaves, and imitating the bird. As many as fifteen or twenty birds may be caught in succession.