#### THE BIRDS OF BANGKOK,

BY W. J. F. WILLIAMSON, F.Z.S, M.B.O.C.

(Continued from Vol. II, No. 3, p. 214).

With the Part published in the previous number of the Journal, the Passerine birds, comprising about 40 per cent. of the total number to be described in this Paper, were completed. For the remaining Orders the same general plan will be followed, as hitherto, except that trinomial designations will be used in all cases where it appears that the birds may properly be assigned subspecific rank. The plan of putting an asterisk (\*) before the names of birds which were not mentioned in the Preliminary List published in 1914 (Vol. i, pp. 41 to 48 of this Journal), will also be discontinued. This arrangement is no longer convenient, in view of the length of time which has elapsed since the List was prepared, and the considerable additions made to it. Further, as a synonymy is now being given, the references to the Fauna of British India—Birds, will be quoted therein, instead of being noted by means of numbers in brackets after the serial numbers in this Paper.

#### ORDER-PICI.

Family PICIDÆ--Woodpeckers.

Siamese (general name), นกหัวขวาม-Nok hua-khwan.

68. Gecinus vittatus eisenhoferi (Gyld.). The Siamese Scaly-bellied Green Woodpecker.

Gecinus vittatus (part.), Robinson and Kloss, Ibis. 1911, p. 45; Robinson, Ibis, 1915, p. 738.

Picus vittatus eisenhoferi, Gyldenstolpe 1916, p. 88.

Gecinus vittatus cisenhoferi, Robinson, Journ. F. M. S. Mus., vii (1917), p. 164.

Description. Length about 305 mm. (12 in.). Toes 4. Crown and occipital crest crimson in male, black in female; back, scapulars, wing-coverts and upper tail-coverts, olive-green; rump yellowish green; a greyish white superciliary streak, bordered with black above, continuing to behind the eye—the black bordering extending forward to

the base of the forehead; lores, cheeks and ear-coverts greyish to brownish white; malar band black, streaked with white; primaries dark brown with whitish spots on both webs; secondaries and tertiaries dark brown on inner webs, olive-green on outer webs—both these sets of wing-feathers having white spots on inner webs, and the secondaries usually with traces of the same on outer webs also; tail-feathers sometimes brown but usually brownish black, imperfectly barred on the basal half with light brown. Chin, throat and upper breast mustard-yellow, usually paler on the first two parts; lower breast, abdomen and flanks dull greenish or yellowish white, each feather margined with dark green, giving a striped appearance; lower tail-coverts similar, but darker.

Iris dull red. Upper mandible and tip of lower dark brown to blackish, remainder of lower mandible greenish yellow. Legs dusky green. Claws horn-colour.

Distribution. This is the bird which I have wrongly recorded [Journ. N. H. S. Siam, i, p. 197 (1915)] as Gecinus viridanus. present subspecies is based on a femile obtained by Gyldenstolpe at Pa Hing, in Northern Siam, and differs from the true G. vittatus, which occurs in Java, Sumatra and Malaya, chiefly by its larger size. Robinson records two specimens obtained by Kloss in South-eastern Siam, in which part of the country I have likewise procured it. My collection also includes specimens from Pak Jong and Muak-lek in Eastern Siam, from Bangkok and Ayuthia in the Central division of the country, and from Hua Hin and Nong Kae in South-western Siam. It thus appears to be a widely distributed bird. In my specimens the wing ranges from 132-143 mm. in length. According to Robinson (op. cit., 1915) the present form of this Woodpecker is quite cut off from the true G. vittatus, as the species inhabitating the Siamese portion of the Malay Peninsula, from about Trang or Bandon northwards, is the allied but perfectly distinct G. viridanus. If this is so, G. vittatus eisenhoferi is probably approaching the southern limit of its range at Nong Kae.

My one Bangkok specimen was shot at Wat Thong Insri, on the bank of the Chao Phya river, about 3 miles due south of Sathorn Road, on 20th January 1914. Habits, &c. This Woodpecker, as well as Micropternus brachyurus burmanicus and Tiga javanensis intermedia (vide pp. 322 and 323), are, I believe, only to be found, and that sparingly, in the betterwooded parts of the environs of Bangkok, such as in the extensive areas under fruit-garden cultivation, in large Temple grounds (where shooting cannot be indulged in), and in certain narrow belts of trees on the banks of the main river and some of the canals.

# 69. Dendrocopus pectoralis (Blyth.) The Spotted-breasted Pied Woodpecker.

Dendrocopus pectoralis, Blanford, Faun. Brit. India, Birds, iii (1895), p. 41; Williamson, Journ. N. H. S. Siam, i, p. 45 (1914).

Description. Length 178 mm. (7 in.). Toes 4. Forehead brownish white. Crown, in male more or less crimson, in female black; sides of face and neck white; ear-coverts white to brownish; a black malar band on each side from the base of the lower mandible to the side of the neck; nape and hind neck black, all the rest of the upper plumage barred with black and white; quills dark brown, with white spots on both webs; tail-feathers blackish, with elongate white to fulvous white spots on both webs, forming incomplete bars; chin and throat white, breast and abdomen pale brownish, the former distinctly spotted with dark brown, the latter indistinctly, with pale brown; flanks barred brown and whitish; vent and under tail-coverts spotted with brown and tinged with reddish pink.

Iris dark brown. Upper mandible blackish, base paler; lower mudble slate colour, tip dusky. Mouth slate colour. Legs dark plumbeous, soles somewhat paler and with dull yellowish green tinge. Claws dark horn-colour.

Distribution. So far as this country is concerned, apparently only recorded up to the present from Bangkok, Central Siam. The general distribution of this species is peculiar. According to Blanford, it occurs in Pegu, which is in about the same latitude as Northern Siam, and in certain other parts of Burma, but not in Tenasserim. It is also found in Cochin-China, and in Java and Sumatra, but apparently not in British Malaya—vide Robinson, Hand-list, Birds Malay Peninsula (1910), p. 11, note to No. 310.

The bird is evidently, therefore, of very local distribution, and it will be interesting to see if it is eventually found in any other part of Siam.

Habits, &c. In Bangkok this is a common bird, and freely enters the gardens round houses. Its presence may, usually, be at once detected, either by its note of chik, chik (or, more occassionally, a rapid chr-chr-chr), or by the very quick tapping noise which it makes with its bill, as it seeks to dislodge insects from their places of concealment under loose bark, or in the dead wood of trees, &c. I have also occasionally seen it clinging to one of the wooden posts carrying the electric light wires on the sides of the roads in my neighbourhood, tapping away vigorously—the insects for which it was in search being presumably concealed in the longitudinal cracks in the posts.

On two occasions I have had eggs brought to me, which I believe to be of this bird, in January and May, respectively. It must, of course, breed here regularly.

# 70. Micropternus brachyurus burmanicus Hume. The Pegu Rufous Woodpecker.

Micropternus burmanicus, Hume, Proc. Asiat. Soc. Bengal, 1872, p. 71. Micropternus brachyurus (part.), Blanford, Faun. Brit. India, Birds, iii (1895), p. 57.

Micropternus phaeoceps, Williamson, Journ. N. H. S. Siam, i, p. 198.
Micropternus phaioceps phaioceps, Gydenstolpe 1913, p. 48; id. 1916, p. 94.

Description. Length about 235 mm. (9½ in.). Toes 4, first very short. Male. The whole plumage dull rufous (occasionally light chestnut); top of the head and occiput tinged with dusky brown, the feathers slightly paler at the edges—those of the chin and throat with much more distinct pale edges; feathers beneath the eye and for a short distance backwards and forwards tipped with crimson; back, rump, upper tail-coverts, wings and tail with black transverse bars, which, however, are sometimes wanting on the back. Lower surface rather duller in colour than the back, and without black bars except on the flanks, thighs and under tail-coverts. Female. No crimson below the eyes. Immature birds. Crescentic dark brown marks on the lower surface, which become paler and tend to disappear as the birds arrive at maturity.

Iris brown. Bill very dark brown, plumbeous at base of lower mandible. Mouth dusky flesh. Legs greyish brown. Claws horny.

Distribution. The race of the Rufous Woodpecker found in Siam-at all events from Bangkok northwards-appears to be the one which Hume described from Thavetmyo, Pegu. It is intermediate between the larger and paler northern form, M. b. phaeoceps, and the darker and smaller southern race, M. b. brachywrus, the distinguishing characteristics of which are given by Blanford (op. cit., p. 55) in his key to the three Indian "species" of this genus then recognised. The author mentioned admits that they are "merely geographical races, separated by very slight characters, and tending greatly to pass into each other." This being the case, they must all, according to the law of priority, be described as subspecies of brachyurus, which is Vieillot's name dating from 1818, whereas phaioceps (of which the spelling was subsequently changed to phaeoceps by Hume) was adopted by Blyth, only in 1845. I have birds from Northern, Eastern and Central Siam among which there are specimens, from each of those divisions, which might be assigned to either group, if Blanford's test be applied,

As regards size, the wing-measurements of my birds vary from 120 mm., in specimens from Bangkok and Samkok, Central Siam, to 134 mm. in one from Meh Lem, in the Northern division of the country. It may also be noted that, of a pair obtained with one shot at Ayuthia, the wing of the male is 120 mm., while that of the female is 130 mm. The longest wing-measurement given by Gyldenstolpe is 127 mm.

My one Bangkok specimen (a male) was obtained near Klong Toi on 14th June 1915.

### 71. Tiga javanensis intermedia Blyth. The Goldenbacked Three-toed Woodpecker.

Tiga javanensis (part.), Blanford, Faun. Brit. India, Birds, iii (1895), p. 61; Ogilvie-Grant, Fasc. Mal. Zool., iii (1905), p. 99; Robinson and Kloss, Ibis, 1911, p. 47; Gyldenstolpe 1913, p. 49; Williamson, Journ. N. H. S. Siam, i, p. 198.

Tiga javanensis intermedia, Gyldenstolpe 1916, p. 95.

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Description. Length about 290 mm. (11.4 in.). Toes 3. Crown and occipital crest red in the male, black, with elongate sub-terminal spots on each feather, in the female; sides of head and neck white, except a broad black band from the eye to the nape, and another, sometimes mixed with white, from the malar region to the shoulder; hind neck and top of back black; back, scapulars and wing-coverts golden olive, often with orange or scarlet edges to the feathers; rump and lower back crimson; upper tail-coverts brown to blackish; outer webs of secondary quills golden olive, duller than back, rest of quills dark brown with white spots on inner webs—the tips of the primaries pale brown to whitish; tail black. Lower parts buffy white, sometimes with rufous tinge on chin and breast; a broken black stripe down the middle of the chin and throat, getting broader below; feathers of breast and abdomen with broad black edges, so as to produce a scale-like pattern; flanks and lower tail-coverts barred black.

Iris dark brown. Upper mandible and terminal half of lower, dull black; remainder of lower mandible bluish slate. Mouth bluish slate. Legs dusky green. Claws horn-colour.

Distribution. The long-winged race of this Woodpecker has been reported from Northern and Central Siam, and from Kok Lak in South-western Siam. In addition, I have obtained it at Muak-lek and Lat Bua Khao, in the Eastern division of the country, and at Sriracha, in South-eastern. A female (with a wing of 133 mm.) which my collector procured at Bangnara, Patani, in the extreme south of the Siamese portion of the Peninsula, is, however, referable to the short-winged southern form, T. j. javanensis.

My single Bangkok specimen (φ) was shot at Wat Thong Insri, on the left-bank of the river about 3 miles south of Sathorn Road, on 6th February 1915.

### 72. Iynx torquilla Linn. The Wryneck.

Iynx torquilla, Blanford, Faun. Brit. India, Birds, iii (1895), p. 78; Gyldenstolpe, Journ. N. H. S. Siam, i, p. 230 (1915).

Description. Length 191 mm. (7.5 in.). Above brownish grey, finely speckled and mottled; a dark brown patch, unevenly coloured, from the nape to the middle of the back, another across the coverts of each wing, a few longitudinal dark streaks on the lower back, and

some imperfect ocelli on the wing-coverts; quills brown with rufous spots on the outer, and paler ones on the inner webs; tail with narrow wavy black cross bands; sides of head, throat, foreneck and upper breast pale rufous, with dark narrow cross-bands; a dark patch on the ear-coverts; lower breast and abdomen whitish, with arrow-head shaped dark marks.

Iris hazel. Bill brown. Legs and feet greenish brown (Oates). Distribution. The only specimen so far recorded from Siam is that listed by Gyldenstolpe as having been obtained by Mr. Emil Eisenhofer in Northern Siam. I subsequently procured one (3) in Bangkok, on 24th April 1916, sitting on a small tree near the railway crossing over Klong Toi. Unfortunately I omitted to note the colours of the soft parts, the particulars of which, as given above, are as recorded by Blanford. The bird is said by Blanford to be a winter visitor to the plains of India and Burma, but is evidently a rare one to Siam. It is not reported from French Indo-China by Oustalet, nor does it appear in Robinson's Hand-list of the Birds of the Malay Peninsula (1910).

#### ORDER-ZYGODACTYLI.

Family CAPITONIDE—Barbets.

73. Xantholaema haematocephala (P. L. S. Müll.)

The Crimson-breasted Barbet.

Siamese, unanos-Nok ti-t'hong.

Nantholaema haematocephala, Blanford, Faun. Brit. India, Birds, iii (1895), p. 98; Ogilivie-Grant, Fasc. Malay. Zool., iii (1905), p. 101; Robinson and Kloss, Ibis, 1911, p. 44; Gairdner. Journ. N. H. S. Siam, i, p. 149 (1915); Robinson, Journ. F. M. S. Mus., v, p. 95 (1915); Gyldenstolpe 1916, p. 101; Robinson, Journ. F. M. S. Mus., vii, p. 165 (1917).

Description. Length up to 171 mm. (6.75 in.). Lores black; forehead and sinciput crimson; a black band across the vertex extending down each side of the head behind the eye to the malar region; occiput and sides of neck greyish green; remainder of upper parts yellowish green; quills blackish, the primaries (except the first two) narrowly, the remaining wing-feathers more broadly, edged on the outer webs with green, and all the quills with paler edges on the inner webs especially towards their bases; a broad supercilium and a still

broader streak below the eye, with the chin and throat, sulphur-yellow; breast, abdomen and under tail-coverts yellowish white, streaked longitudinally with dark green, especially on the flanks; tail faintly washed below with pale verditer-blue.

The young is duller, and lacks the crimson and black on the foreneck.

Iris dark brown. Bill blackish, except base of lower mandible which is slate-colour. Mouth slate-colour. Bare orbital skin dull crimson. Legs pinkish coral-red to lake-red. Claws blackish in adults.

Distribution. A very widely distributed bird, and common nearly everywhere. The authors quoted in the synonymy record this species from all parts of the country except the Central, Eastern and South-eastern divisions, in all three of which, however, I have personally obtained it.

Habits, &c. In Bangkok this is one of the best-known and most familiar birds, under its trivial name of Coppersmith, which it derives from the supposed resemblance of its monotonous note, took, took, took, to the tap of a hammer on metal. This note it repeats times without number from its perch on the upper branches of some leafy tree, and at each note it nods its head. The Siamese name, it is of interest to remark, means "Gold-beater bird," while the Malays call it Tukany besi, or the "Blacksmith" bird.

This Barbet, in common with most other Eastern species of the family, is mainly a fruit-eater, but is said occasionally to take insects. Any large trees which bear an abundance of small-sized fruits, such as *Ficus elastica*, the common Rubber tree of Bangkok, and *F. religiosa*, the *Ton Pho* of the Siamese, are a great attraction to these birds at certain seasons.

#### ORDER-ANISODACTYLI.

Family CORACIADAE—Rollers.

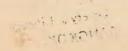
74. Coracias affinis McClell. The Burmese Roller.

Siamese, นกตรฐาน - Nok ta-khāb.

Coracias affinis, Blanford, Faun. Brit. India, Birds, iii (1895), p. 105; Ogilvie-Grant, Fasc. Malay. Zool., iii (1905), p. 109; Gyldenstolpe 1913, p. 51; Gairdner, Journ. N. H. S. Siam, i, p. 150 (1915); Gyldenstolpe 1916, p. 117.

Description. Length about 330 mm. (13 in.). Head above

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greenish blue to bluish green, passing into bright pale verditer-blue on the broad and long supercilia; back, scapulars and tertiaries dull brownish green to greenish brown; smaller and median coverts dark blue, greater secondary coverts greenish blue, greater primary coverts pale blue; quills deep blue, with a bar of pale blue across the terminal half of the primaries; rump deep blue; upper tail-coverts bright pale blue; middle tail-feathers dusky bluish green, the others deep blue at the base and light blue on the terminal portion, with the ends tipped darker; sides of head, chin and throat purplish blue, the throat-feathers with shining blue shaft-stripes; breast and abdomen vinaceous brown (in some specimens with slight purplish gloss) passing on lower abdomen into dusky and then light blue on vent and under tail-coverts; winglining dark purplish blue.

Iris brown. Bill blackish. Mouth pale lemon-yellow. Edges of eyelids and bare facial skin brownish or greenish yellow to dull yellowish orange. Legs yellowish brown to brownish yellow. Claws blackish.

Distribution. The authorities quoted in the synonymy record this bird from the Northern, Western and Peninsular divisions of the country, while I have also obtained it at Bangkok, Central Siam, and at Nong Khor, near Sriracha, in the South-Eastern division. As it has been reported from Indo-China by Oustalet, it is almost certain to be found, as well, in Eastern Siam, so it may be said to be widely distributed throughout the country.

In this connection it is of interest to note that, though this bird occurs as far down the Malay Peninsula as Patani (the southernmost Province of Siam), it has not yet been observed in British Malaya.

Habits, &c. In Bangkok the Burmese Roller (frequently called the Blue Jay by Europeans) is a common resident species. It is a solitary bird, except during the breeding season (which is in the hot weather) and is usually to be seen seated motionless on some exposed position, such as the uppermost branch of a tree, an electric light cable on the roadside, or a post in a garden, but also, not infrequently, on a bund in a padi-field or on a heap of earth or stones. Its flight is, ordinarily, a slow and steady flapping, not unlike that of the Crow, but, in common with its Indian congener (C. indica), it has, as remarked by

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Property of the Siam Society's Library BANGKOK Jerdon, quoted by Blanford (op. cit., p. 104), "the habit of occasionally making sudden darts in the air in all directions" at a rapid pace. I have only observed these darting flights during the breeding season, so they are probably made for the purposes of display, and the bird then shows that it possesses considerable wing-power, contrasting strikingly with its usual quiescent habits.

The Roller is generally rather a silent bird. Its ordinary note (which is always heard more frequently in the breeding season) is a short and harsh *cheh*, *cheh*, which is uttered both when at rest and while on the wing. It also has a louder screaming cry of *che-eh*, *che-eh*, *che-eh*, always produced while on the wing and very often when performing the aerial evolutions referred to above.

### Family MEROPIDÆ—Bee-eaters.

Siamese (general name), นกคับคา-Nok khab-kha.

75. Merops philippinus Linn. The Blue-tailed Bee-eater.

Merops philippinus, Blanford, Faun. Brit. India, Birds, iii (1895), p. 111; Ogilvie-Grant, Fasc. Malay. Zool., iii (1905), p. 109; Robinson and Kloss, Ibis, 1911, p. 37; Gairdner, Journ. N. H. S. Siam. i, p. 150 (1915); Robinson, Journ. F. M.-S. Mus., v, p. 146 (1915), and vii, p. 152 (1917).

Merops superciliosus philippinus, Gyldenstolpe 1916, p. 110.

Description. Length up to 305 mm. (12 in.), of which the tail is 152 mm. (6 in.). Lores and a streak past the eye to the ear-coverts black, bordered above by a narrow pale verditer-blue supercilium and below by a broader blue line. Upper parts to rump, including the wing-coverts, green with a rufous tinge, passing into the verditer-blue of the rump, upper tail-coverts and tail; tertiaries sometimes bluish, and sometimes green with bluish tips and edges; middle pair of tail-feathers with long elongate black tips, and all the tail-feathers darkish grey beneath; wing-feathers (except the tertiaries) darker and more rufous green than the back, and tipped with black; chin yellowish; throat chestnut, passing into green on the breast, into greenish blue on the abdomen, and then into pale blue on the vent and under tail-coverts; wing-lining light brownish rufous.

Iris crimson. Bill black. Mouth flesh-colour. Legs dark pur-

plish brown, soles paler. Claws blackish.

Distribution. So far recorded from Northern, Central, Western and Peninsular Siam, while I have also obtained it at Muak-lek in the Eastern part of the country, in April, and at Cape Liant, in Southeastern Siam, in October. It is thus universally distributed.

Habits, &c. I have records of this Bee-eater in Bangkok in all months (of different years) except May, when it also doubtless occurs. Nevertheless, the bird is a partial migrant, and presumably wanders about the country as food supplies wane or increase in particular localities. It is sometimes in Bangkok for weeks at a time and then disappears suddenly, to return again a few weeks later. The bird is, perhaps, less often seen in the hot weather, when it is probably away breeding.

The Blue-tailed Bee-eater is a handsome and familiar bird, and may often be seen seated on an electric light wire, an exposed twig of a tree, or other point of vantage, whence it swoops after some passing insect, or makes a short flight in the air for amusement, returning, as a rule, to the same perch. Frequently, several of them are found together. Their general mode of flight consists of a few rapid beats of the wings, followed by a graceful sailing motion, with wings outstretched. The note (always, I believe, uttered while on the wing) is a rather melodious rolling one, crui, crui, crui, repeated several times.

### Family ALCEDINIDAE-Kingfishers.

Siamese (general name), นกกรมศัน—Nok kra-ten.
76. Ceryle rudis leucomelanura Reichenb. The Eastern
Pied Kingfisher.

Siamese, นกกระเดินบกหลัก-Nok kra-ten pak lak.

Ceryle varia, Blanford, Faun. Brit. India, Birds, iii (1895), p. 119; Williamson, Journ. N. H. S. Siam, i, p. 45 (1914); Gairdner, Journ. N. H. S. Siam, i, p. 150 (1915).

Ceryle rudis leucomelanura, Gyldenstolpe 1913, p. 53; id. 1916, p. 114.

Description. Length about 279 mm. (11 in.). Crown, nape and small nuchal crest black, sparingly streaked with white; lores and a long supercilium white; a black eye-streak from the base of the bill to the ear-coverts, connected by a narrow black band with the black gorget; an imperfect white collar; back, scapulars and wing-coverts

black, with white edgings to the feathers; rump-feathers mixed black and white; primaries white at base, black at terminal end—the white on the inner webs of the outer primaries being extended diagonally across the distal half; secondaries largely white, with irregular black markings, mainly on the outer webs; all wing-feathers, except the first few primaries, with white tips; tail-feathers white on the basal half and on the tip, a broad black band occupying the greater part of the distal half. Lower plumage, with cheeks and wing-lining, white, some small elongate black spots forming a malar patch; a broad gorget across the breast (interrupted in the middle, in the female) and some black spots on the flanks, sometimes nearly meeting across the abdomen. The white on the throat, breast and abdomen is very pure and glossy.

Iris brown. Bill black. Mouth flesh-colour. Legs and feet blackish. Claws black.

Distribution. Recorded, up to the present, only from Northern, Central and Western Siam. Gyldenstolpe remarks (op. cit., 1916) that south of the latitude of Bangkok "it seems to be extremely rare, though it is found here and there in suitable places." I am not aware on what grounds the latter part of this statement is based, as no such occurrences appear to have been reported.

Habits, &c. I have obtained or observed this Kingfisher in Bangkok in all months of the year except June, November and December, but it probably sometimes occurs in these months also. So far as Bangkok is concerned, it is, however, a partial migrant, and comes and goes irregularly. When present, the bird cannot fail to be observed, both on account of its conspicuous black and white plumage, its frequently uttered twittering cry, and its habits, which tend to made it a familiar bird.

This is the only Kingfisher, occurring in Bangkok, which does not habitually watch for its prey from a fixed perch. Its ordinary method is to hover over the water, when it sees or suspects a fish, with its body horizontal, head bent down and beak vertical, and wings beating the air rapidly. From this position it plunges, head foremost, quite vertically—the first yard or two of its descent of 20 or 30 ft. being

aided by a stroke or two of the wings, to gain impetus, but before the water is reached the wings are closed. The momentum carries the bird right under the water, but it is out again in a second with (if success has been achieved) a small fish in its bill, held at right angles. It then, while still flying, drops the fish in the air for a moment, only to re-seize it instantly, by the head, and swallow it. I have seen this done several times. If the fish for which it is darting disappears after the bird commences plunging, it checks its downward course before reaching the water, and flies upward again.

The Pied Kingfisher is, of course, often to be seen seated on trees, stumps or posts near the water, but I have never observed it plunge from these. When uttering its twittering cry, while seated, it has the habit of flicking its tail up.

# 77. Alcedo ispida bengalensis Gm. The Eastern Common Kingfisher.

Alcedo ispida (part.), Blanford, Faun. Brit. India, Birds, iii (1895), p. 122; Williamson, Journ. N. H. S. Siam, i, p. 45 (1914); Ogilvie-Grant, Fasc Malay, Zool., iii (1905), p. 111.

Alcedo bengalensis, Robinson and Kloss, Ibis, 1911, p. 32.

Alcedo ispida bengalensis, Gyldenstolpe 1913, p. 54; Robinson, Ibis 1915, p. 730; Gyldenstolpe 1916, p. 115; Robinson, Journ. F. M. S. Mus., vii, p. 146 (1917).

Description. Length up to 171 (6.75 in.). Crown and nape transversely banded black and blue; lores and a band below the eye to the ear-coverts deep ferruginons, ending in a white (or slightly rufous white) patch at the side of the neck; lower edge of the lores black, and sometimes a black spot at the base of the lower mandible, whence there is a broad blue stripe along the cheek; middle of back, rump and upper tail-coverts bright blue; scapulars and wing-coverts greenish blue, each of the lesser and median coverts tipped with a bright blue spot; quills brown, edged outside with greensh blue; tail blue above, brown beneath. Chin and throat white, sometimes with a pale ferruginous wash; remainder of lower parts deep ferruginous. The intensity and shade of the blue varies to some extent.

Iris very dark brown, Bill blackish throughout in males; in females the lower mandible is orange at the base and dusky at the tip. Mouth livid flesh to fleshy orange. Legs coral-red, sometimes dusky in front. Claws pale to dark horn.

Distribution. So far recorded from Northern, Central, South-eastern and Peninsular Siam, while Gairdner (Journ. N. H. S. Siam, i, p. 150) believes he has seen it in the Western division of the country. The bird thus remains to be recorded only from Eastern Siam, but as Oustalet has reported it from French Indo-China, it may with certainty be regarded as a species distributed throughout the country in suitable localities.

Habits, &c. In Bangkok this little Kingfisher is a winter visitor, and I have observed it from the end of August to the end of March, i. e., for a space of about 7 months. As it is resident in the country, it apparently moves away, after the hot season sets in, for breeding purposes.

This Kingfisher is a small edition of the common European one, and has similar habits. As far as my observation goes, it is usually a solitary bird, and may often be seen sitting quietly on some low twig over-hanging the water, or on a post or other near-by convenient coign of vantage, ready to plunge for an unsuspecting small fish. It is also said by Blanford occasionally to take tadpoles or water-insects. Its flight, as Blanford observes, is swift and straight, generally just above the surface of the water, and I have observed that, when so flying, it frequently utters its sharp, quick note of chi-chi-chi-chi, followed by chi, chi, chi, two or three times, more slowly.

# 78. Ceyx tridactyla (Pall.). The Indian Three-Toed Kingfisher.

Ceyx tridactyla, Blanford, Faun. Brit India, Birds, iii (1895), p. 127: Ogilvie-Grant, Fasc. Malay. Zool., iii (1905), p. 111: Robinson and Kloss, Ibis, 1911, p. 33; Herbert, Journ. N. H. S. Siam, i, p. 118 (1914); Robinson, Journ. F. M. S. Mus., vii, p. 146 (1917). Ceyx tridactylus, Gyldenstolpe 1913, p. 54; id. Journ. N. H. S. Siam, i, p. 231 (1915).

Description. Length up to 140 mm. (5.5 in.). A spot at base of forehead, pointed behind, black washed with purple; crown, nape, hind neck, lower back and upper tail-coverts orange-red with a ruddy violet gloss, especially over the eye and on the rump and upper tail-coverts; a black spot before the eye; lores, cheeks, ear-coverts and lower parts from the throat orange-yellow; chin and throat whitish; a deep blue spot behind the ear-coverts, bordered behind by white;

scapulars and inter-scapulary region dark purplish blue; wing-coverts edged with deep blue; quills dark brown, outer web of first primary entirely, and inner webs of all wing-feathers partially, dull rufous; edge of wing, smaller upper coverts and under wing-coverts rufous; tail orange-red.

Iris brown. Bill and feet bright vermillion-red (Blanford).

Distribution. Recorded, so far, from Peninsular, Northern and Central Siam, the first being the only division of the country in which the bird appears to be at all plentiful. Robinson and Kloss state that C. tridactyla is "widely distributed throughout the Peninsula in heavy jungle, usually near water," and Robinson has informed me that it is common in Trang. As regards the other parts of the country, the only records I can trace are the following:—

One obtained by Mr. P. A. R. Barron at Koh Si-chang, Inner Gulf of Siam, in 1912 and preserved in spirit (Gyldenstolpe, op. cit., 1913). Mr. Barron informed me that this specimen dropped dead in his compound, while flying overhead.

One caught alive by some boys in a garden near Bush Lane, Bangkok, on 7th April 1914, and brought to Mr. E. G. Herbert, who put it into his aviary. Here it lived for two months, feeding on small prawns, until it succumbed during a heavy thunderstorm (Herbert, loc. cit.).

One obtained by Mr. Emil Eisenohfer in Northern Siam (Gyldenstolpe, op. cit., 1915). Mr. Eisenhofer informed me that it was a solitary specimen, and was shot near Den Chai.

One procured by H. R. H. the Prince of Chumpon at Muang Non, near Bangkok, a year or two ago.

From the above particulars it is evident that the bird is rare in what may be called Siam proper, and a further point to be noted is that in none of the four examples reported can it be said that the birds were found in "heavy jungle," which Robinson and Kloss mention as their habitat in the Malay Peniusnla. Koh Si-chang is certainly well-wooded in parts, but not heavily timbered, while the jungle round Den Chai is deciduous and rather open. In the other two cases the specimens were obtained in garden land, on the alluvial plain of Central Siam.

79. Pelargopsis gurial burmanica Sharpe. The Burmese Stork-billed Kingfisher.

Siamese, นกกระเด็น ใหญ่ or นกกำกวม—Nok kra-ten yai, or Nok kam kuam.

Pelargopsis gurial (part.), Blanford, Faun. Brit. India, Birds, iii (1895), p. 129; Williamson, Journ. N. H. S. Siam, i, p. 45 (1914); Gairdner, ibid., p. 150 (1915).

Pelargopsis gurial burmanica, Gyldenstolpe 1913, p. 54; Robinson,

Ibis, 1915, p. 731; Gyldenstolpe 1916, p. 114.

Description. Length about 356 mm. (14 in.). Crown, nape and sides of the head, including the cheeks and the ear-coverts greyish brown. Neck all round and lower parts, including wing-lining, brownish yellow of varying shades—the chin and throat usually paler and the breast darker; upper back, scapulars, outer webs of quills, longer tail-coverts and tail dull greenish blue—the colour on the wing- and tail-feathers usually bluer; primaries (except the outer webs towards the base), inner webs of secondaries, and lower surface of tail brown; back, rump, and shorter tail-coverts bright blue.

Iris brown. Bill dark blood-red, paler below and dusky at tip. Edges of eyelids pinkish orange. Legs coral-red. Claws horn-colour.

Distribution. This race of the Stork-billed Kingfisher has been recorded from all the divisions of the country except Peninsular Siam, where it is apparently replaced by the allied form, P. gurial (or capensis) malaccensis, which is slightly smaller and with some differences in colouration. Robinson found birds from Koh Pennan, off Bandon, intermediate between the two races, but nearer to the Malayan form.

Habits, &c. This is the largest of our local Kingfishers and is a resident bird. It is not uncommon in the better-wooded parts of the suburbs, and, so far as I have observed, is always solitary. It has a loud cry, uttered while flying, of ka-a ka, ka-a ka, ka-a ka, repeated rather slowly several times, and with a rising inflection on the second syllable of the first note.

80. Halcyon smyrnensis fusca (Bodd.). The Whitebreasted Kingfisher.

Halvyon smyrnensis (part.), Blanford, Faun. Brit. India, Birds, iii (1895), p. 132; Ogilvie-Grant, Fasc. Malay. Zool., iii (1905), p. 110; Robinson and Kloss, Ibis, 1911, p. 34; Williamson, Journ. N.

H. S. Siam, i, p. 45 (1914); Robinson, Journ. F. M. S. Mus., v., pp. 92 and 145 (1915).

Halcyon smyrnensis fusca, Gyldenstolpe 1913, p. 54; Robinson Ibis, 1915, p. 732; Gyldenstolpe 1916, p. 116.

Description. Length about 267 mm. (10.5 in.). Chin, throat and middle of breast white, all the rest of the head, neck and lower plumage deep chestnut-brown; scapulars and inter-scapulary tract, tertiaries, outer webs of secondaries above, and upper surface of tail blue, usually with a greenish tinge in certain lights; lower back, rump and upper tail-coverts brighter blue; greater wing-coverts duller and darker blue; median coverts black; lesser coverts chestnut; secondary quills black, except on the upper surface of the outer webs; primaries blackish brown, with the basal portions above pale blue and a white patch on the inner webs.

Iris brown. Bill dark sealing-wax red, sometimes dusky at the tip, the base and the edges of the mandibles. Eyelids dull pinkish brown. Legs and feet bright sealing-wax red behind, reddish brown in front. Claws dark horn-colour.

Distribution. Has been recorded from all the divisions of the country, except the Western, but must occur there also.

Habits, &c. In Bangkok I have only observed this bird from September to February, so it would appear to be a partial migrant, leaving this neighbourhood for some other part of the country for breeding purposes. According to Blanford the Indian bird breeds from March to July, and it is probable that the Siamese one does so at the same time of the year. It is less often seen in Bangkok than H. pileata, the Black-capped Kingfisher, but has very similar habits, and is usually to be observed perched on overhanging branches or other points of vantage on the banks of our tidal canals or ponds, but I believe its food consists chiefly of fresh-water crustacea and other denizens of the mud-banks.

# 81. Halcyon pileata (Bodd.). The Black-capped Kingfisher.

Halcyon pileata, Blanford, Faun. Brit, India, Birds, iii (1895), p. 133;
 Gyldenstolpe 1913, p. 55; Robinson, Ibis, 1915, p. 732; id. Journ,
 F. M. S. Mus., vii (1917), p. 148.

Haleyon pileatus, Ogilvie-Grant, Fasc. Malay, Zool., iii (1905), p. 110: Robinson and Kloss, Ibis, 1911, p. 34.

Description. Length about 292 mm. (11.5 in.). Crown, nape and sides of head black—a few white feathers below the eye; a broad buffy white collar round the neck, followed by a blackish band behind; scapulars, back, rump, upper tail-coverts, upper surface of tail, outer webs of secondaries and tertiaries above, and greater primary coverts deep blue, brighter on the lower back and rump; remaining wing-coverts black; primary quills black at the ends (the first primaries for half their length, the inner ones for less), with the basal portion white on the inner web, pale bluish lilac on the outer web, opposite the white, and deep blue for a short distance beyond the lilac part; secondary quills deep blue on outer web and a small portion of inner web near the shafe, the remainder of the inner web black. Chin, throat and middle of breast white; sides of throat and breast and remainder of lower surface, with the wing-lining, ferruginous buff; tail black beneath.

In young birds, and in many females, the breast-feathers have dark edges, and there are a few small black spots on the sides of the throat.

Iris dark brown. Bill deep sealing-wax red, dusky at base. Mouth sealing-wax red. Legs dusky red in front, bright sealing-wax red behind and on soles. Claws dark horn-colour.

Distribution: So far recorded from all parts of the country except the Eastern and Western, but it must occur there also, as it is found both in French Indo-china (Oustalet) and in Burma, including Tenasserim. Blanford (op. cit., p., 134) remarks that this bird is "seldom found inland," though specimens have been obtained some distance up the rivers in Burma. In Siam it has been procured by Gyldenstolpe several hundred miles from the sea, at Meh Lem, Prae, Northern Siam, and I have also a specimen from the same locality, obtained four years later.

Habits, &c. This bird, so far as my observations extend, occurs in Bangkok only from October to March, during which months it is quite common. It probably leaves Bangkok to breed, but there is no information either in the Fauna of British India, or Hume's Nests and Eggs of Indian Birds (2nd. Elition) as to when this occurs, while in the Catalogue of Birds' Eggs in the British Museun (Vol. iii, p. 38), no dates are given for the two clutches recorded from Borneo and China, respectively. Like other Kingfishers, this bird has a straight,

undeviating flight, during which it utters a loud, noisy cry of cheh, cheh, cheh, cheh, cheh, cheh. It has another note, uttered while sitting—a rather melodious trill of kr-r-r-r or chr-r-r-r.

82. Sauropatis chloris (Bodd.). The White-collared Kingfisher.

Siamese, นก กินเบียว-Nok kin-pio.

Saurepatis chloris, Blanford. Faun. Brit. India. Birds, iii (1895), p. 135
Halcyon humei, Ogilvie-Grant, Fasc. Malay. Zool., iii (1905), p. 111.
Halcyon armstrongi, Robinson and Kloss, Ibis, 1911, p. 34; Robinson Journ F. M S. Mus., v, p. 145 (1915).

Haleyon chloris, Robinson, Ibis, 1915, p. 731; id. Journ. F. M. S. Mus., vii, p. 149 (1917).

Halcyon chloris armstrongi, Gyldenstolpe 1916, p. 117.

Description. Length about 241 mm. (9.5 in.). Crown, nape and sides of head to below the eye bluish green—the ear-coverts sometimes black; a white streak above the lores, extending back above the eye; a broad white collar; upper back and scapulars dull bluish green to greenish blue; lower back, rump and upper tail-coverts bright blue; upper surface of tail and of outer webs of wing-feathers deep blue, sometimes with a slight greenish tinge; quills, except on the outer webs, blackish, as is also the lower surface of the tail-feathers; entire under-surface of body, including the wing-lining, white, sometimes faintly tinged with buff.

Iris dark brown. Upper mandible, and tip and edge of lower, dark horn-colour; remainder of lower mandible pinkish white; legs and feet plumbeous to brownish plumbeous. Claws horn-colour.

Distribution. This species occurs only in the coastal regions of the country, from Patani in the South-west to the South-eastern limits of Siamese territory, as well as on the Western side of the Malay Peninsula.

As Robinson has shown, there is no justification for the attempts which have been made to divide up this species into various races. The specimens I have examined bear out his contention that the variations on which these races have been founded are individual and not local.

Habits, &c. In Bangkok I have observed the White-collared Kingfisher from January to September, and it is exceedingly abundant from March to June, during which time it is very much in evidence, both on account of its striking appearance and its incessant calling. Its notes appear to be of three different kinds, viz., (1) a loud screaming cry of ka, ka, ka, ka, ka, uttered while flying, (2) a regular cheep, cheep, cheep, cheep, usually uttered four times, but occasionally five, while seated, and (3) a soft, confidential note of krui-krui, also when seated, which last appears to be of an amative nature, as I have only noticed it when a pair are together, undisturbed.

It breeds here regularly from February to June, or possibly a little later, and lays four white eggs, either in a tree-ant's nest, or in a hole in a tree.

### Family UPUPIDAE-Hoopoes.

83. Upupa epops longirostris Jerdon. The Burmese Hoopoe.

Siamese, นกการางหวอวาน—Nok karang hua khwan.

Upupa indica, Blanford, Fann. Brit. Ind., Birds, iii (1895), p. 161;
Ogilvie-Grant, Fasc. Malay. Zool., iii (1905), p. 108; Robinson and Kloss, Ibis, 1911, p. 35; Robinson, Journ. F. M. S. Mus., v, p. 145 (1915); Gairdner, Journ. N. H. S. Siam, i, p. 150 (1915); Williamson, ibid., p. 198 (1915),

Upupa epops indica, Gyldenstolpe 1913, p. 56. Upupa epops longirostris, Gyldenstolpe 1916, p. 111.

Description. Length of males up to 330 mm. (13 in.). Crest pale rufous, all the feathers with black tips; sides of head, chin, neck all round, breast and upper portion of abdomen varying from ashy rufous to pale rufous with a vinous tinge—the hind neck being generally darker and more rufous than the other parts; bend of wing (in adults) pale rufous; upper back light brown (sometimes with ashy tinge), then a black band, followed by a buffy white one, this in turn succeeded by a broad brownish black band with imperfect whitish or buffy bars; rump white; upper tail-coverts white at base, black at ends; tail black with a white bar across it halfway down; primary and secondary quills black, the first primary generally, but not always, with a white spot on the inner web, the other primaries with a white band across them, imperfect on the innermost three or four, and the secondaries with white bases and four white bands; tertiaries dark brown, edged with buffy white and with an oblique band of the same colour on the inner web. Lower portion of abdomen and under tailcoverts white.

Iris reddish brown to dark brown. Bill dark brown, pale to pinkish horn-colour at gape and at base of lower mandible. Mouth pinkish flesh. Legs purplish brown to plumbeous, soles greyish white. Claws dark horn-colour.

Distribution. Recorded, by the authors quoted in the synonymy, from all parts of the country except the Central and South-eastern divisions where, however, I have obtained it.

In Bangkok this is a rare bird and I believe only seen in the cold season. The first of my two Bangkok specimens was caught in the room of a house on the west bank of the river on the 26th January 1915, while the second was shot in the neighbourhood of Sathorn Road on the 16th January 1917. Both are fully adult birds. As a rule they are found here singly, but I once saw a pair on Race-course Road, and another pair was observed some years ago by Dr. Malcolm Smith in a compound in Suriwongse Road.

The Burmese race of the Hoopoe (to which also the Siamese bird belongs) has been separated from the Indian form mainly on account of its larger size, including the bill which, in typical male specimens, measures 66 mm. (2.6 in.) in length, or more. A male in my collection from Rayong, South-eastern Siam, has a wing of 155 mm. (6.1 in.) and a bill of 65 mm., while another male, from Nong-kae, South-western Siam, has a bill of 68 mm., but with a comparatively short wing of 140 mm.

Habits, &c. Hoopoes are generally found in fairly open wooded country, such as mixed scrub and bamboo, though I have observed them in heavy evergreen forest at Nong Khor, near Sriracha, in Southeastern Siam. They feed on the ground on insects, and are said by Blanford to extract grubs with their long bills from some distance beneath the surface. I have found them very common in some parts of the country, such as in the coastal region of the South-west.

(To be continued.)