

ON THE ORNITHOLOGY OF THE RHINO  
SANCTUARY UDJUNG KULON  
IN WEST JAVA (INDONESIA)

by

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(Concluded.)

Family PITTIDAE

151. *PITTA SORDIDA* subsp. Green-breasted Pitta.

There is only one record from the reserve—a single bird seen 19 September 1937 along the Tjikarang river. It was not possible to tell whether the bird belonged to the Javan breeding race *mülleri* or to the migrant race *cucullata*. It seems likely to have been a straggler.

**General remarks.** Resembles the following species in habitat preference and behaviour, though it is less common, particularly in damper West Java, and more of a lowland bird—not occurring above 800 m.

The call—unknown to the author—may resemble that of the Banded Pitta.

It breeds on or just above the ground often in a mass of vines. The nest is a large, untidy domed structure of loosely constructed vegetable matter, with the entrance at the side (Hoogerwerf 1963).

B 152. *PITTA GUAJANA AFFINIS* (Horsfield) Banded Pitta.

Frequents a wide range of habitats but favouring deep shade and thick wildernesses of rotan, bamboo and low palms. Almost exclusively terrestrial, behaving like most thrushes but more skulking. Usually met with singly but also in pairs, and once three were heard calling together. This characteristic call frequently betrays the bird's presence.

**General remarks.** Widespread in Java up to at least 1,500 m. but erratic in occurrence. Sometimes found near human habitation if there is sufficient cover as for example in salak plantations near Djakarta and in rotan thickets in the Botanic Gardens, Bogor.

The call is a fairly loud "pa-òk," a high pitched "pieuw" or a softer "pùrrrr".

Nest and nestsite as in the preceding species save that nests were often found 1 to 3 metres up and sometimes clearly visible from a distance (Hoogerwerf 1947f, 1948a, 1963).

## Family HIRUNDINIDAE

*N 153. DELICHON DASYPUS DASYPUS* (Bonaparte)

Asian House-Martin.

A single bird, perhaps the same, on November 14 and 15, 1954 soaring above the lalang pasture at Tjidaon constitutes the only record.

**General remarks.** Apparently rare throughout Java though it is said to be more common along the south coast and in the more mountainous parts of its range at times. It is not however known from above 1,500 m. in Java.

*N 145. HIRUNDO RUSTICA GUTTURALIS* Scopoli House Swallow.

Almost all records from the reserve are from the coast or the pastures and are of small flocks, but the species appears to be relatively less common than elsewhere in the island. Twenty birds seen together along the coast of Tdj. Alang-Alang on August 21st. constitute the earliest record.

**General remarks.** A common migrant in Java usually found in urban or cultivated areas near the coast or other major water sources. Occurs however up into the highest mountains. Roosts in larger flocks and also gathers in greater flocks prior to the northward migration.

*B 155. HIRUNDO TAHITICA JAVANICA* Sparrman Pacific Swallow.

Fairly uncommon in the reserve, and all records surprisingly are pre-war. The cause of such restricted occurrence might be lack of nest sites, but the species is known to nest in caves and on rocky precipices and these are widely available along the west coast.

**General remarks.** A common resident in many parts of Java up to at least 1,500 m. but favouring the cultivated lowlands. Generally found in small flocks, often mixed with House Swallows from which, with care, they can be told by their dark underparts and short tails.

A twittering song, as in most swallows.

Its nest resembles that of the European House Swallow and is made of pellets of mud firmly attached to houses, under bridges, on rock faces etc., and lined with feathers or soft vegetable matter (Hoogerwerf 1965c)



**B 156. *HIRUNDO DAURICA STRIOLATA* Temminck**

Striated Swallow.

Only found once in the reserve—at the same place as the House-Martin but twelve years later, in November 1954. Its scarcity could again be due to the lack of normal nesting sites.

**General remarks.** Occurs erratically in Java up to 1,500 m., favouring the cultivated lowlands—including towns and villages—particularly near the coast. Usually in pairs or small flocks. Flight rather slower than its congeners' and alternating with soaring flight—rather like *Artamus leucorhynchus* (No. 203).

Usually silent but occasionally makes a loud "tjèw-tjèw" or a vibrating "schwrrrrr".

Nest and nestsite similar to House Swallow; nests often attached to rocky walls of coastal caves though never in the dark parts; nests single and isolated or in small groups.

**Family MUSCICAPIDAE****Sub-family MUSCICAPINAE****N 157. *MUSCICAPA LATIROSTRIS LATIROSTRIS* Raffles**

Brown Flycatcher.

One found January 16, 1943 in a low tree in the forest along the path from the coast to Java's First Point. No other records: the bird usually prefers higher altitudes.

**General remarks.** A common, widely distributed migrant to Java during the rainy season, found up to at least 1,500 m., favouring the higher forested parts particularly the edge of primary forest, but also found in open forest, fruit gardens, bamboo clumps in cultivated areas and gardens. Silent, confiding and usually solitary or flocking with other insectivorous birds.

**B 158. *MUSCICAPA RUFIGASTRA RHIZOPHORAE* (Stresemann)**  
Common Blue Flycatcher.

There is a skin of a female in the Bogor Museum taken on Pulau Peutjang, which is part of the reserve. No other certain records. One probable sight records from tidal forest on Handeulum Bay on September 7, 1937, but in fact the species may be less rare as it is easily mistaken for the following species, furthermore it is relatively common in parts of the Sunda Strait region and not always restricted to tidal forest (for example on Krakatau Island) although it does seem to be so restricted in Java.

**General remarks.** Locally common in the mangrove belt, preferring shady spots and often in stands of nipa palm (*Nypa fruticans*). Feeds close to the ground. Usually found alone or in pairs; confiding. Unlike the next species male and female plumages are alike, which as both species are often found in pairs assists identification.

It utters a loud, clear, melodious song resembling that of the next species.

Nest and nestsite also resemble those of the following species though restricted, in Java, to tidal forest and its immediate vicinity (Hoogerwerf 1965a).

**B 159. *MUSCICAPA BANYUMAS CANTATRIX* (Temminck)**  
Hill Blue Flycatcher.

Found quite often though the only certain records are those where the males and females, which differ strikingly in plumage, were seen together for it is possible that *Muscicapa rufigastrea*, as on Krakatau, is not restricted to the tidal forests. Interestingly whilst *M. rufigastrea* occurs all over Krakatau in the absence of *M. banyumas* the reverse is the case on Pulau Panaitan—another island in the Sunda Strait.

In the reserve this species occurs in fairly open undergrowth in places where the forest canopy of the palms overhead cut out the daylight. Usually alone or in pairs and silent and inconspicuous.



**General remarks.** One of the commonest flycatchers in Java, perhaps more common at moderate elevations than in the lowlands or highlands. Frequents almost any kind of woodland or forest, usually singly but also in pairs and sometimes in small family groups.

A rather penetrating, melodious song alternates with a call like "se-sie-fûûjie-fû-sie". A loud "tjèk-tjèk" call when disturbed. The song resembles that of *Zoothera citrina* though considerably softer.

The nest is a small, rather untidy, cup-shaped structure placed some metres above the ground in an epiphyte-laden tree, a shallow hollow of a tree or a clump of bamboo. It is composed of small roots and fibrous plant matter—often the hairlike fibres of the arèn palm (*Arenga* sp.)—and is unlined. In Java *Cacomantis variolosus sepulcralis* is a brood parasite of this, and many other, species (Hoogerwerf 1962).

**B 160. GERYGONE FUSCA SULPHUREA** Wallace Fly-eater.

Within the reserve this species is restricted to the coastal zone where it favours the scrub and low trees of the tidal forest and dry land. Usually found alone or in pairs betrayed by the characteristic melodious call.

**General remarks.** Locally common in the coastal zone throughout Java but also found in open forest particular bamboo groves or clumps of conifers, up to 1,500 m.

A sweet, short, characteristic song not carrying very far and hard to syllabify.

Nest dome-shaped with a hooded entrance near the top, resembling that of *Nectarinia jugularis* (No. 213), with a small tail and composed of fine vegetable matter and bound with spider's web etc. The top is suspended from an outer twig, sometimes quite high up. In Java this species is the only known fosterparent for young *Chrysococcyx malayanus*.

**B 161. HYPOTHYMIS AZUREA JAVANA** Chasen & Kloss  
Black-naped Flycatcher.

Fairly common and widespread in the reserve, favouring well-wooded country, usually near clearings or open ground, and living in the middle or upper storey.

**General remarks.** Common in Java, though not known above 1,500 m. Its lively habits, piercing call notes and its custom of joining flocks of other insectivorous birds (the so-called 'drongo flocks' or mixed species flocks) make it particularly easy to see.

It has a loud penetrating call sounding like "tjoo-wiet" or "tjiet-wiet". The nest is a solid cup-shaped structure made of vegetable fibres mixed with green moss and bound with spider's web, with which it is also attached to a branch, usually not very high up (Hoogerwerf 1964).

**B 162. RHIPIDURA JAVANICA JAVANICA (Sparrman)**

Fantail Flycatcher.

Common and widely distributed. Chiefly found in shrubs and small trees in open country and along the coast, including the tidal forests and pastures. Inside the forest only found where there are clearings grown with bamboos, gingers or other low ground cover. Usually alone or in pairs close to or on the ground but also with mixed flocks when it climbs to the canopy.

Some birds found in the reserve had a very long tail suggesting intergradation with the race *longicauda*, which is known from islands in the Sunda Strait.

**General remarks.** In the cultivated parts of Java one of the most common birds up to at least 1,500 m. Habitat varies from city gardens to scattered copses in the rice plains to the edge of primary forest. Constantly in motion—often out in the open—incessantly spreading and folding its tail and often uttering its characteristic, high-pitched call... a penetrating "tjie-wie-wiet" or "tie-tie-tie-tie-tjiet-tjie-wiet".

Its nest is often placed in clumps of bamboo, trees or shrubs, 3-5 metres up, sometimes higher; it is a very neat, cup-shaped structure (Plate XXIII. fig 1). rather like that of *Hypothymis*, composed of small roots, bamboo scales, woodshavings, small grassblades and fibres bound together, plastered and attached with spiders' web. This species is known to be parasitised—at least rarely—by *Cacomantis variolosus sepulcralis* (Hoogerwerf 1965a).



**B 163. TERPSIPHONE PARADISI AUSTRALIS** Chasen

Paradise Flycatcher.

Fairly common in the reserve. Most records were from primary forest between the Njewaän and Tjidaon and between Tjigenter and Pemagaran, usually with mixed species flocks or so-called "drongo flocks". Generally stays well hidden by the canopy where it is betrayed by its penetrating screams.

**General remarks.** Elusive and shy in Java, restricted to primary forest and other heavily forested parts, chiefly in the southern half of the island. Perhaps commoner in damper West Java than in Central or East Java. Keeps to the lowlands, rarely exceeding an altitude of 800 m.

The harsh, far-carrying screech "tjie-wiet-tjie-wie-wiet" or "tjietèw" is fairly similar to the call of the Black-naped Flycatcher (No. 161) but is much louder.

Nest and nestsite also similar but the nest is larger and is always in heavily-forested, rough country.

**B 164. PHILENTOMA VELATUM VELATUM** (Temminck)

Maroon-breasted Flycatcher.

Also rare in the reserve; most records are of birds found with mixed species flocks, usually in much the same habitats as the preceding species but also in forest edge and parklike surroundings.

**General remarks.** Found uncommonly in Java at altitudes not exceeding 800 m. in much the same habitats as the preceding species. Although it keeps mainly to heavy forest it does also occur in thinly leafed trees and can then be confused with *Lalage fimbriata*.

Relatively silent: its call is a piercing "tie-tie-tie-twiet-twiet-twiet".

The only nest ever found by the author was in a sapling in the edge of primary forest at about 800 m.; it was two metres up and visible for some distance. It resembled the nest of *Hypothymis azurea* but was shallower with thicker walls, and it was rather loosely attached to the forked branch where it had been built.

## Family CAMPEPHAGIDAE

**B 165. *CORACINA JAVENSIS JAVENSIS* (Horsfield)**

Javan Cuckoo-Shrike.

Single birds or occasionally pairs were found in or near the mangrove belt on a number of occasions. Uncommon.

**General remarks.** Not uncommon in Java though rather local. Its main habitat appears to be the coastal areas and lowlands, particularly the tidal forests, but it also occurs up to at least 1,500 m. favouring new forest clearings where it stays in the tops of thinly-leaved trees. A lively bird, it is usually found alone or in pairs and it draws attention to itself with its loud penetrating whistle "pie-ieuw-pie-ieuw" or "twie-iet".

Its small nest resembles that of most species of drongo—a cup-shaped structure with a shallow nest chamber, composed of coarse vegetable matter, lined with finer fragments; usually high up on a horizontal forked branch it is difficult to detect.

**B 166. *LALAGE NIGRA NIGRA* (Forster)** Pied Cuckoo-Shrike.<sup>1</sup>

Recorded regularly in the reserve but never numerous, favouring low trees particularly in such areas as the game pastures but occurring almost anywhere except in heavy forest. Most commonly alone or in pairs, and sometimes found associating with other species: the largest flock recorded in the reserve was about ten birds on Tjikarang pasture 10 January 1943.

**General remarks.** Rather common in most cultivated parts of Java from the coastal area up to at least 1,500 m. occurring both in open country and forest and also in towns. Although it may feed over a wide area it is a sluggish, silent and retiring birds usually staying well hidden in the outer leaves of tall shrubs and trees.

The call is a rather quiet, unmelodious, oft repeated "tjook-tjook" or "trè-trè-trè-trè".

The nest and nestsite resemble those of the preceding species but the nest is much smaller, closer to the ground and well hidden. See Plate XXIII, fig. 2.

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1) More often called Pied Triller. Ed.





Fig. 1. Nest of *Rhipidura javanica*, Fantail Flycatcher.



Fig. 2. *Lalage nigra*, Pied Cuckoo-Shrike (in this case a stuffed bird) with nest and eggs.





Fig. 1. Nest of *Pericrocotus cinnamomeus*, Small Minivet.



Fig. 2. Nest and eggs of *Lanius schach bentet*, Grey-backed Shrike



**B 167. PERICROCOTUS FLAMMEUS SIEBERSI** Rensch

Scarlet Minivet.

Apparently very rare in the reserve. There are only two records: two birds were collected in or near primary forest between Java's First Point and the Tjidaon in July 1955. The local population may eventually be shown to differ from the Javanese race *siebersi* as these two birds are somewhat intermediate between *siebersi* and *xanthogaster*—of Sumatra.

**General remarks.** In Java this species occurs from sea level to the highest mountain tops, though it seems rarer above 2,500 m. It is also perhaps rather less common in the lowlands and this may explain its status in Udjung Kulon. Occupies much the same habitat as the preceding species but favours areas of extensive forest and avoids towns. Prefers thinner leafed trees where it flits constantly from tree to tree, often covering long distances in a short time. Sometimes in small flocks but more often, unlike the following species, in pairs.

The call is a soft "kreueueu...tûtû", "tû-tûrrr" or a repeated "kûrrrr" and sometimes a louder, higher pitched "sooit-sooit-sooit-sitsitsitsit".

The nest—generally well above the ground and well camouflaged in the foliage is a very beautiful cup-shaped structure resembling that of the Chaffinch, *Fringilla coelebs*. It is composed of fairly coarse leaf-stalks, pine needles and similar material with little or no lining but it is decorated with a thin layer of light-coloured moss bound with spiders' web, which in most cases also binds it to the fork in the branch (Hoogerwerf 1966b).

**B 168. PERICROCOTUS CINNAMOMEUS SATURATUS** Baker

Small Minivet.

Fairly common in the reserve, occupying almost the same habitat and range as *Lalage nigra* (No. 166) but preferring the thinly leafed canopy or the crowns themselves so that it is easy to see. Most records are from the vicinity of the pastures or the high trees along the coast.

**General remarks.** Status in Java as in the reserve except that it is rather more erratic in occurrence than the Pied Cuckoo-Shrike. It occurs in the cultivated plains, the foothills and the lower mountains including towns. Habits similar to the Scarlet Minivet but more gregarious and almost always found in flocks.

Rather noisy, particularly when feeding in flocks when the call is a high-pitched, penetrating "tsjitsjitsjitsjitsjitsji".

Nest and nestsite resemble those of the preceding species, though finer material is used and the nest is very well hidden. See Plate XXIV. fig. 1. (Hoogerwerf 1952).

#### Family CHLOROPSEIDAE

##### *B 169. AEGITHINA TIPHA DJUNGKULANENSIS* Hoogerwerf

Common lora.

One of the most common birds of the reserve. Almost always found alone or in pairs, and often drawing attention by its characteristic calls. The population has been described (Hoogerwerf 1962b) as different from that of the rest of Java.

**General remarks.** Common in Java from sea level to 1,500 m. in the same habitats as *Lalage nigra* (No. 166).

The call is a fairly loud "tjie-pow" or "tjiepeu...tjie-peuw" alternating with a louder "twiecieet-towh", "tjieuw-tjieuw" or sjiewiet".

The nest is rather like that of *Rhipidura javanica* (see Plate I) and varies in height although it is usually above 4 metres. This species is the only one known to be brood-parasitised by *Cacomantis sonneratii musicus* (No. 130) in Java.

##### *B 170. CHLOROPSIS SONNERATI SONNERATI* Jardine & Selby

Malachite-shouldered Leaf-bird.

One record from the reserve: a bird shot from the crown of a tall tree in primary forest between the Tjidaon and Java's First Point.



**General remarks.** Apparently a bird of the jungle with a preference for the thick foliage of tall trees, apparently nowhere common in Java it is a quiet species behaving much like the following species but avoiding cultivated areas and not found above about 1,000 m.

Call not known to the author; nor its nest or nestsite or breeding habits.

**B 171. *CHLOROPSIS COCHINCHINENSIS NIGRICOLLIS* (Vieillot)**  
Green Leaf-bird.

In the reserve this species was chiefly found in forest edge and in scattered trees in the open, particularly near the game pastures and in tall njamplung trees near the coast; also occasionally in primary forest. Usually seen in flocks, often mixed flocks and feeding over a wide range.

**General remarks.** Common in many parts of Java from sea level to at least 1,500 m. but erratic in occurrence. Habitat much as in Udjung Kulon with the addition of cultivated areas and occasionally towns and villages. Behaves much like the Common Iora but is more gregarious, less noisy and usually stays higher in the tree tops.

Its typical call is a "tjuk-tjuk-tjieliet", "tjuk-tjiewiet", there is also a bulbul-like twittering "sjiewiet", "tsjieuw" or "hielieuw" and a sweet song.

The nest, well concealed in the outer leaves of taller trees, is a cup-shaped cradle composed of fine fibres, blades or leaf strips etc. bound together and lined with spiders' webbing and placed in the fork of a branch.

**Family PYCNONOTIDAE<sup>1</sup>**

**B 172. *IRENA PUELLA TURCOSA* Walden** Fairy Bluebird.

Apparently uncommon in the reserve but observed several times and once, in July 1955, collected in primary forest, usually high above the ground, between the Tjidaon and the Tjibunar; on such occasions it was found in small flocks—once a mixed species flock.

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1) The genus *Irena* is now rarely treated within the family Pycnonotidae. ED.

**General remarks.** Apparently nowhere common in Java though perhaps more so in undisturbed primary forest but it is not known from above 800 m. Usually found alone or in mixed or monospecific flocks in fruiting trees, particularly fig trees.

It is said to have an extensive vocal repertoire. Birds in flight have been heard to utter a short "wik" or "wûûk," a repeated "wiëkwëk" and a prolonged song "wiëk-wëk-wûû-wiëkwiekwiekwiekwiekwiekwëk-wiëkwëk-wûû".

There are no breeding records known from Java (Hoogerwerf 1965 c, Kooiman 1940).

**B 173. CRINIGER BRES BRES** (Lesson) Scrub Bulbul.

Not uncommon and widespread though in view of the extent of suitable habitat available it cannot be considered common. Usually remains well hidden in the thicker areas of primary forest and secondgrowth, two to four metres above the ground and usually found alone or in pairs.

**General remarks.** Common in Java up to 1,500 m. but particularly between 200 and 800 m. in primary forest and secondgrowth wherever found.

It's call is a harsh, unmelodious "trû-tû-tû-tû-trû-tû-tû-tjûk-tjûk" or "tjûk-tjûk-tjieuw" or a repeated "hieuw-hieuw".

The nest is an untidy shallow cradle-like structure, composed of arèn palm fibres or similar material on a coarser base including decayed leaves etc. and lined with some brownish fibres, attached with spiders' web to a forked branch not far above the ground.

**B 174. PYCNONOTUS ATRICEPS ATRICEPS** (Temminck)

Black-headed Bulbul.

Rather common, particularly in forest edge and secondgrowth. Usually found in thick brushwood tangled with rotan and other palms along the south coast between the Tjitadhan and the Tjibunar, and between the Tjigenter and the Tjikarang rivers. Like most bulbuls found in small flocks, often with other bulbuls, sometimes quite close to the ground. Lively, noisy and thus conspicuous.



**General remarks.** Of very local occurrence in Java up to about 800 m. favouring quiet areas of secondgrowth and particularly fresh or deserted clearings with scattered trees and scrub. Behaviour like most other bulbuls. In some areas melanistic birds occur but such specimens were found only once in Udjung Kulon.

The call is an unmelodious "tijk-tjik-tjik" -or "tjiep-tjiep-tjiep".

The nest is an untidy, cup-shaped structure of dead leaves, leaf skeletons and bits of bark bound with long fern stalks and lined with fine grasslike fibres with cobwebs at the edges and attaching the nest to the forked branch, usually not far above the ground (Hoogerwerf 1963a).

**B 175. *PYCNONOTUS ZEYLANICUS* (Gmelin)**

Yellow-crowned Bulbul.

Uncommon. Only recorded a few times and then usually identified by its song, for this is a very hard bird to spot. Occurred in dense brush, reed beds and thickets of secondgrowth near rivers or marshes, apparently usually alone. Most records are from the Tjigenter area and the edge of the monsoon marshes in the Niur region.

**General remarks.** Uncommon or rare in Java in habitats like those described at Udjung Kulon, up to 800 m. Its attractive song makes it a favourite cage-bird in Indonesia and abroad, and as Javan birds are considered the best songsters they are in heavy demand and the population may be suffering accordingly.

The song is difficult to syllabify but amongst the calls are a loud clear "tjûlûûw-tûû-tjûlûûû-tûû", "tjelûû" and "tjûû-tjûû-tjûû-lûw" and a call like "tjang-koorawok".

According to Houwing (in litt.) the nest is placed in thick brush-wood one to two metres from the ground and is composed of rootlets, dead leaves and fibres of the arèn palm.

**B 176. *PYCNONOTUS GOIAVIER ANALIS* (Horsfield)**

Yellow-vented Bulbul.

Erratic in occurrence but fairly common in secondgrowth or areas such as the game pastures with scattered trees and bushes. Although other bulbuls, especially *P. aurigaster*, occur in the same habitat the small flocks are usually composed of Yellow-vented Bulbuls alone. Active, noisy and gregarious.

**General remarks.** This species and *P. aurigaster* are the two commonest bulbuls in Java, at least up to 1,500 m. except in primary forest. Although these two species share the same habitat sometimes one is common and the other absent; this species is always the less in evidence on account of its shyer disposition.

The call is a repetitive "djök-djök-djök" or "tjök-tjök-tjök".

The nest is a solid, strongly cupped structure composed of grasslike material and fibrous plant fragments such as leaf ribs, fibre from the arèn palm, bamboo bracts etc. usually decorated outside with reed or bamboo leaves and bound with spiders' webbing and placed two to five metres up. In East Java this species has occasionally been found fostering young *Cacomantis variolosus sepulcralis* (Hoogerwerf 1963).

**B 177. PYCNONOTUS PLUMOSUS PLUMOSUS** Blyth

Large Olive Bulbul.

Seems to occur in the same areas, and sometimes with, *P. atriceps*, but may prefer denser forest rarely coming lower than five metres from the ground. Not particularly geegarious.

**General remarks.** Throughout Java this species occurs in the lowlands in similar habitats to those frequented in Ujung Kulon up to 800 m. Usually found in pairs or small flocks, rarely mixed with other bulbuls.

The call is a quiet chattering; the song, although sweet is neither striking nor frequent.

The nest site is usually in low shrubs or saplings, not more than 2 metres up, well concealed and often in forest edge. The nest closely resembles that of the preceding species but in some cases contains more dry, grassy leaves, rotan leaves and long weed stems and is more garnished with spiders' webbing (Hoogerwerf 1965a).

**B 178. PYCNONOTUS SIMPLEX PRILLWITZI** Hartert

Moore's Olive Bulbul.

Relatively commoner in the reserve than anywhere else in Java, sharing the range, habitat and behaviour of the preceding species and *P. atriceps*, but particularly common in the open scrub of palms, rotan and screw pines (*Pandanus*) along the south coast. In plumage resembles the preceding species but its light coloured eyes are a useful character.



**General remarks.** Common only in a few places in Java, mainly in the lowlands along the southern side and often close to the shore; favours open country with some secondgrowth or new or deserted clearings, often feeding in company with other bulbuls. Rarely found above 500 m. and probably does not exceed 800 m.

Its chattering is like that of the preceding species and the author has not heard any song; nor has he found the nest, but Houwing (in litt.) says that it is placed 2 to 3 metres up in thick undergrowth in secondary forest and is a typical bulbul nest composed of rootlets, dead leaves, lalang grass blades and arèn palm fibres (Hoogerwerf 1966a).

**B 179. *PYCNONOTUS DISPAR DISPAR* (Horsfield)**

Ruby-throated Bulbul 1:

Although found in the reserve with the preceding species and with *P. atriceps* this species favours primary forest edge and similar sites in secondgrowth, occasionally also found deeper into the forest. In behaviour it is shyer and it stays higher in the trees. Not common but regularly seen in different spots and varying numbers.

**General remarks.** More widespread than the preceding species and although perhaps commoner in the south, it occurs from sea level to at least 1,500 m. in the habitat described for Udjung Kulon. Although a typical bulbul in behaviour it is shyer and less gregarious than most species and is less a bird of secondgrowth and more attracted to densely foliated tall trees.

The call—a penetrating “hie-tie-wiet” or “tjieû-tjie-wiet”—is rather striking but not often heard.

The only nest seen by the author was in a thick shrub at the edge of tall forest; typically bulbul but fairly small and neater, composed of coarse plant fragments, leaf ribs, arèn palm fibres etc. and decorated with small dried leaves held with spiders' webbing.

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1) The name *P. dispar*, long applied at specific level to the black-crested yellow bulbuls of Thailand, is now usually replaced by *P. melanicterus* due to the concept of a broader species reaching to Ceylon. Not only Javanese birds have red throats the Thai race *P.m. johnsoni* also has this character. Ed.

**B 180. PYCNONOTUS AURIGASTER AURIGASTER** (Vieillot)

Golden-vented Bulbul.

Occurs with *P. goiavier* (No. 176) and although generally a little commoner it was less common in October 1942 in the Tjidaon-Tjidjungkulon region and in January 1943 on the Tjigenter game pasture; the relatively small amount of suitable habitat may explain its scarcity relative to other parts of Java.

**General remarks.** One of the most common birds in Java from sea level to at least 1,500 m. occurring both in built-up areas and in rough wastelands, and sometimes even occurs in forest edge in mixed species or drongo-flocks.

A wide repertoire of calls of which the most common is a repetitive "tjangkeur" or "tjook-tjook". It occasionally produces a melodious song.

Nest and nestsite resemble those of *P. goiavier*, but it often nests in towns and gardens. In East Java it has been shown to foster young *Cacomantis variolosus sepulcralis*.

**Family MUSCICAPIDAE<sup>1</sup>.****Sub-family TIMALIINAE****B 181. TIMALIA PILEATA PILEATA** Horsfield Red-capped Babbler.

Despite an abundance of suitable habitat this species seems uncommon, and there are only a few sight records. The species is of course a skulker in thick undergrowth and open areas clad with tall sedges, rushes or herbaceous plants and lack of sight records alone might be inconclusive but the species was also but rarely heard. Where recorded it was usually in areas near the pastures, rivers or marshes.

1) In part 1. (Nat. Hist. Bull. Siam Soc. 23 (1/2): 9-65) p. 19 the author points out that he is following the order of species in Chasen (1935), the sub-family Muscicapinae has thus been treated above (Nos. 157-164) separate from the rest of the broad-concept Muscicapidae. Ed.



**General remarks.** Common in Java from sea level to at least 1,500 m. favouring wild sugarcane and similar vegetation along muddy creeks and streams at the edge of the mangrove belt and in mountainous parts inhabiting thick tall herbs or grasses in open or semi-open areas. Usually seen in pairs or small flocks, usually moving low above the ground but occasionally emerging onto an exposed perch and dropping out of sight again when disturbed.

The call, usually made when hidden, is a characteristic "tũrrrr-wie-tie-tie-tiet" or "tick-tick-tick-tick" alternated with a short song "tûtũwieiet-tûtũwiet".

The nest is a very untidy, globular structure of coarse plants, usually less than a metre from the ground.

**B 182. *PELLORNEUM CAPISTRATUM CAPISTRATUM* (Temminck)**  
Black-capped Babbler.

Not too rare in the reserve; frequenting the undergrowth of primary and secondary forest amongst tangled vines, palms and rotan, but emerging occasionally as it feeds on the ground. Usually seen alone but in October 1952 a small flock was seen, and the flock alarm note was a loud "tie-tjie-ie-tũrrrr"; this is rarely heard for the bird is normally very silent.

**General remarks.** Widely distributed in Java up to at least 1,500 m. in West Java and to 2,000 m. in the east, but with a preference for the lower elevations in primary forest, or equally thick forest, bamboo or rotan clumps down to fairly small patches, even quite close to human habitation.

The call is a soft "tût-ũr-ũr-ũr-ũr" or a plaintive "hie-iet" or "tsũũt"; and other authors have given "dik-dik-dik", "tschick-tschick" or "tjewietjẽw,"

The rather untidy cup-shaped nest is composed of dry leaves, twigs, rootlets etc. and lined with fine roots and fibres; it is placed close to the ground often in such palms as rotan or salak (*Zalacca*).

**B 183. *TRICHASTOMA SEPIARIUM SEPIARIUM* (Horsfield)**

Horsfield's Brown Babbler.

Widely distributed and common. Favours the same habitat as the preceding species but is more inquisitive, noisier and more readily leaves the denser tangles, even climbing to the canopy.

**General remarks.** Occupies the same range and habitat in Java as the preceding species but differs in behaviour as noted above. Usually alone or in pairs, but sometimes in small flocks.

The call is a harsh, carrying "gauw-gauw--gauw-tûrrr-gauw-gauw" or "hûrrr-tûrrr... hûrrr-tûrrr" and sometimes a loud "pie-oo-wiet" resembling part of the song of *Cacomantis variolosus*.

The nest is placed close to the ground and is well concealed; it resembles that of the preceding species but is largely composed of coarse, dried leaves, including rotan, and it is lined with finer material such as leaf ribs, flower stalks etc. The species is brood-parasitised by *Surniculus lugubris* (Hoogerwerf 1966c)

**B 184. *TRICHASTOMA PYRROGENYS PYRROGENYS* (Temminck)**

Temminck's Babbler.

One record. A single bird was seen in the understorey of primary forest along the south coast on 20 January 1943 (there is a doubtful record from similar surroundings up the Tjikarang river in October 1941), and as it was not shy it was not too difficult to identify. It is however quiet and the call is not known to the author so that it could have been overlooked and be less rare than this single record indicates.

**General remarks.** Apparently rare in Java, though recorded from a number of localities between sea level and 1,500 m. Frequents primary forest, moving through the understorey.

**B 185. *NAPOTHERA MACRODACTYLA LEPIDOPLEURA***

(Bonaparte)

Large-footed Babbler.

Perhaps not uncommon but erratic in occurrence. This active, noisy babbler occurs in small flocks, usually close to, and sometimes on, the ground amongst impenetrable wildernesses of rotan, salak, bamboo, gingers and similar thickets in the forest.



**General remarks.** A local resident in Java up to at least 1,500 m. in the type of habitat described above.

The call is a loud "takko-têang" or "wattiiii-tiet-tiet-tiet-tiet".

The nest, resembling that of *Trichastoma sepiarium* but considerably larger, was once found in dense rotan in the reserve, but the specimen was lost and no description is now available.

**B 186. MALACOPTERON CINEREUM RUFIFRONS** Cabanis

Smaller Red-headed Tree-Babbler.

Occurs sporadically throughout the reserve but though observations were made along the south or west coasts most were in the Njewaän coastal area and along the path from here to Tjidaon through the heavy coastal forest. Generally frequents light open forest but also occurs deeper and a nest was found in primary forest. Gregarious and usually found 3 to 6 metres from ground level. In behaviour resembles *Macronous flavicollis* more than most of the other babblers.

**General remarks.** Occurs locally in the southern half of Java, excluding areas of cultivation, up to about 800 m. in the same habitat as described above for Udjung Kulon.

The call is a soft, high-pitched "tierietierie", "tjie-ie-rie" or "tjielie-wie-iet" quite unlike any other babbler known from Udjung Kulon.

The nest—found once in the reserve—is a well-made cup-shaped structure, placed rather conspicuously in a small sapling in primary forest and some two metres from the ground; it rather resembles the nests of the smaller bulbuls (Hoogerwerf 1967b).

**B 187. STACHYRIS GRAMMICEPS** (Temminck)

Javan White-breasted Babbler.

Two records from the same part of the reserve. On the second occasion—July 1955—one bird was collected from a small flock in the understorey of primary forest along the west coast. Although apparently rare it may have been overlooked as the author does not know the call.

**General remarks.** Said to be not uncommon in primary forest and similar or neighbouring woods up to 800 m. in the southern half of Java, occurring in small flocks in the understorey.

Call, nest and nestsite unknown to the writer.

**B 188. STACHYRIS MELANOTHORAX MELANOTHORAX**

(Temminck)

Pearl-cheeked Babbler.

Two records: on 10 October 1941 the call was heard from thick brush along an open jungle path and on 12 January 1943 two birds were clearly seen in a dense rotan growth along the south coast. The paucity of records may be due to a general preference for higher altitudes than Ujung Kulon can offer.

**General remarks.** Occurs from sea level to at least 1,500 m. but perhaps rare below 500 m. Sight records are rare as the bird is shy and secretive, remaining well hidden in a habitat resembling that of *Timalia pileata* (No. 181).

The call is a characteristic körrrr-ör-ör-ör; "tèrrr-tèrrr", "hie-türrr-hie-türrr" or "tjie-tjie-tjie-tjie" are other recorded calls.

The nest resembles that of *Timalia pileata*; it is a domed structure with a large side entrance near the top and is chiefly composed of blades of rotan and grass with leaf ribs, rootlets and fibres lined with finer fragments of rotan leaves; it is placed close to the ground and is well hidden. This babbler is known to foster young *Surniculus lugubris* (Hoogerwerf 1947e).

**B 189. MACRONOUS GULARIS JAVANICUS (Cabanis)**

Yellow-breasted Babbler.

Apparently rare in the reserve though the few records relate to a variety of habitats—thin forest at the edge of the tidal forests along Handeuleum Bay, and understorey in primary forest, and chiefly light open forest like *Malacopteron cinereum*.

**General remarks.** A local lowland resident in Java, rarely occurring above 800 m. and favouring tall open brushwood, particularly those covered with vines and creepers—so that deserted agricultural plots are choice haunts. Although it spends most of its time within a few metres of the ground it does climb up into the crowns of tall, particularly epiphyte-laden, trees. Usually found in pairs or in small flocks.



The most characteristic call "tjerrrök-tjөktjөktjөktjөrrr", is usually followed by a whistling call. Other calls are "tjөр-tjөр-tjөр-tjөр" or "tөrrrüt-tөrrrüt"

The nest resembles that of the preceding species. It is a globular hotch-potch of coarse bamboo leaves, rotan leaves and reeds, mixed with sedges etc., with a small opening in the upper part of the front. It is usually well concealed and hard to remove without destroying it; it is usually low down but not as close to the ground as that of *Stachyris melanothorax*.

**B 190. *MACRONOUS FLAVICOLLIS FLAVICOLLIS* (Bonaparte)**

Bonaparte's Yellow-breasted Babbler.

Fairly common in the belt of secondgrowth that surrounds the forested interior of the reserve.

**General remarks.** The range and habitat of this species resembles closely that of the preceding species, although it is perhaps less noisy but stays less hidden and is as a result more easily seen. Sociable, usually found in pairs or in small flocks.

The call also resembles that of *Macronous gularis*, as do nest and nest-site: the species is known to be brood-parasitised by *Surniculus lugubris*.

**Subfamily TURDINAE.**

**B 191. *ENICURUS LESCHENAULTI LESCHENAULTI* (Vieillot)**

White-crowned Forktail.

Occurs locally in the reserve where permanent, clear water streams exist, i.e. in the heavily forested plain between the Tjidaon and the Njewaän rivers and near the river sources in the central hills. Typically found along or near such watercourses either alone or in pairs where it is usually heard first and then glimpsed in quick low flight above the stream.

**General remarks.** Occurs in Java from sea level to over 3,000 m., being perhaps less common in the lowlands, and always frequenting clear, fast flowing streams running through dense forest where it feeds on the rocks and shingle banks, only rarely flying up into trees, but is shy and hard to observe.

The call is a penetrating high-pitched whistle "tie-iet-iet... tie-iet" often used as an alarm note.

The nest is neat and cup-shaped and is placed under a river bank or occasionally along a roadside bank. It is almost exclusively composed of moss, but it is lined with a thin layer of leaf skeletons.

**B 192. *COPSYCHUS SAULARIS JAVENSIS*** Chasen & Kloss  
Straits (or Magpie-) Robin.

Regularly recorded in the reserve, especially in and around the pastures, but not common. Occasionally found at clearings in the primary forest overgrown with low palms or gingers, but typically a bird of open secondgrowth or open country dotted with trees and shrubs where it does most of its feeding on the ground.

**General remarks.** Occurs in much the same habitat as both *Pycnonotus goiavier* (No. 176) and *P. aurigaster* (No. 180) in most of Java, but it is much less common and is found up to at least 1,500 m., although it does occur like them in towns and gardens where it is often conspicuous.

The song is sweet and fairly loud and can be heard almost year round; amongst its varied call notes are a penetrating "tie-wiet... tie-wiet" and an alarm call—a long high-pitched "twie-iet-iet". It is also a versatile vocal mimic.

It breeds quite often in holes or hollow trees, but will also make a sloppy nest of coarse arèn palm fibres, leaf ribs, flower-stalks etc. usually fairly high up in the axillaries of palm leaves, amongst epiphytes and in similar spots. Occasionally brood-parasitised by *Surniculus lugubris* (Hoogerwerf 1947, 1965).



**B 193. *COPSYCHUS MALABARICUS TRICOLOR* (Vieillot) Shama.**

Perhaps commoner in the reserve than the Straits Robin, preferring the lower storey within dense forest but also occurring in open brushwood or thickets and wild areas like the Yellow-crowned Bulbul (No. 175). Shy and hard to locate exactly even when singing, but emerges more in the early morning, usually alone. The Shama and the Yellow-crowned Bulbul are the two best singers in the reserve. Birds from this area are indetical with those of the rest of Java but differ strikingly from the birds of nearby Pulau Panaitan which have the under tail black instead of white.

**General remarks.** Apparently rather uncommon in Java to-day, found in the lowlands, up to 800 m., but because of its shyness it is hard to be certain of its status. Its habitat throughout Java is much as in Udjung Kulon. Its apparent scarcity may also be due to a genuine reduction of numbers caused by the capturing of many for the market as it is a beloved cage bird.

In addition to its sweet far-carrying song it has a variety of calls including a harsh "hieuw", "hie-tie-tie-tie" resembling somewhat the call of some small birds of prey, and "tjûk-tjûk-oowie-wie-wie". It is also a good mimic and it has an alarm note "tak-tak-tak".

The nest and nest-site resemble those of the Straits Robin, but the nest is better hid thanks to its denser habitat, often in clumps of bamboo (Hoogerwerf 1962).

**B 194. *ZOOTHERA INTERPRES INTERPRES* (Temminck)**

Temminck's Ground Thrush.

A few records, all of single birds, mostly from the south and west coast but once seen on Pulau Peutjang. Stays well hidden, usually on the ground or a few metres above it in the dense habitat already described for *Pellorneum capistratum* (No. 182) and *Napothera macrodactyla* (No. 185). In July 1955 one was shot in an almost impenetrable rotan thicket near the south coast.

**General remarks.** Occurs locally in the same habitat elsewhere in Java, though usually uncommon. Normally shy and retiring. The irregularity of its occurrence is demonstrated by Bogor Batanic Gardens, where in 1943 and 1944 a few were regularly seen feeding on the lawns and in other open places, yet the species was previously unknown there and has not occurred since, and would not usually be seen so openly. Usually found singly, though several may be within the general area, and almost always feeding on the ground.

Very silent. The alarm note is a soft "tûrrr-tûrrr". There is also a sweet song, rather like that of the next species but softer.

The only two nests known to the author were found on Pulau Tindjil, a couple of miles to the south of Udjung Kulon; both, greatly resembling that of the following species, were placed in small saplings in the understorey of primary forest, some two metres up, poorly concealed and visible from some distance away.

**B 195. ZOOTHERA CITRINA RUBECULA** Gould

Grey-and-orange Ground Thrush.

Uncommon, but resident and somewhat commoner than the preceding species, whose habitat it shares. Shy in the reserve though often confiding elsewhere.

**General remarks.** Very similar in range, habitat and behaviour to the preceding species, but whilst *Z. interpres* seems to prefer the lower altitudes *Z. citrina* seems to prefer the higher levels and to be less local, occurring in cultivated country and even towns and villages. Though occasionally seen in tall trees it is principally terrestrial and keeps to the understorey.

Although one of the best songsters in Java, the song is less loud than that of the Shama and is thus less impressive. Alarm calls include a high-pitched "tierr-tierr-tierrr", a single "tierrr," or "triii" often repeated several times.

The nest is a solid cup-shaped structure, usually 3 to 8 metres up, and composed of grassblades, bamboo leaves, rootlets, fibres, leaf ribs etc. and lined with small rootlets, arèn palm fibres, and, in some nests with a base composed of a thick layer of fine rootlets mixed with mud (Hoogerwerf 1951).



## Subfamily SYLVIINAE

**B 196. *ORTHOTOMUS SUTORIUS EDELA* Temminck**

Long-tailed Tailorbird.

Thinly distributed or rare in the reserve; perhaps the latter as the characteristic call of this noisy bird was not often heard. In habits and behaviour resembles the following species but stays better hidden.

**General remarks.** Occurs from sea level to 1,500 m. in Java in much the same habitat as the next species but apparently more erratic and less common, though it stays in cover much more and may thus create this impression falsely.

The very loud, characteristic call notes cannot be mistaken: a repetitive "tjie-tjie-tjie-tjie-tjie" or "wiet-wiet-wiet-wiet".

The nest is almost completely composed of seed down, usually kapok, mixed with rootlets, plant fibres, grassblades etc. bound together by one large leaf or several small ones sewn together with spiders webbing or cocoons, often hiding the nest so well that it is almost invisible. The hole is firmly attached to the surrounding foliage from one to two metres up.

**B 197. *ORTHOTOMUS SEPIUM SEPIUM* Horsfield Ashy Tailorbird.**

Much more common and more evident than the preceding species in the reserve, occurring widely, favouring the coastal regions and avoiding the primary forest except where there are broad clearings covered with palms, gingers etc. Most at home in light forest and open scrub jungles, particularly in the lower storey. Lively and gregarious, almost always on the move—behaving rather like the two species of *Macronous* (Nos. 189 and 190).

**General remarks.** One of the commonest birds of Java up to at least 1,500 m. usually in the same habitat as such common species as *Pycnonotus goiavier*, *P. aurigaster* and *Copsychus saularis*, and just as confiding. It also occurs deeper into the forest and into thickets of rotan, bamboo etc. than they do, and although it prefers the understorey and may occasionally climb high into the crowns, it is almost never seen on the ground.

Its call is a monotonous "tjieuw-tjieuw-tjieuw", "turrr-turrr" an oft repeated "tzi-wiet . . . tzi-wiet" or "tiglietz-tiglietz-tiglietz".

The nest and nest site resemble those of the preceding species. The entrance to the chamber is at the top and the outside is decorated with the cocoons or 'egg-bags' of spiders. This species is one of the fosterparents of *Cacomantis merulinus* (No. 131). See plate XXV. (Hoogerwerf 1948, 1962a).

**B 198. *CISTICOLA EXILIS LINEOCAPILLA* Gould**

Streaked Fantail-Warbler.

One record: October 4, 1942 a single bird was flushed in the lalang grass covered pasture in the Tjidaon area. This is its typical habitat and its rarity must be ascribed to the absence of expanses of such habitat in the reserve.

**General remarks.** Common in Java up to 1,500 m. preferring dry or semi-arid plains covered with lalang or similar vegetation with scattered weeds or shrubs, even if such areas are near towns or villages. Generally secretive and well concealed, it occasionally perches out on top of an exposed stalk or is seen flying low over its territory during its courtship performance.

It has a few rather soft calls and a melodious song during its nuptial flights.

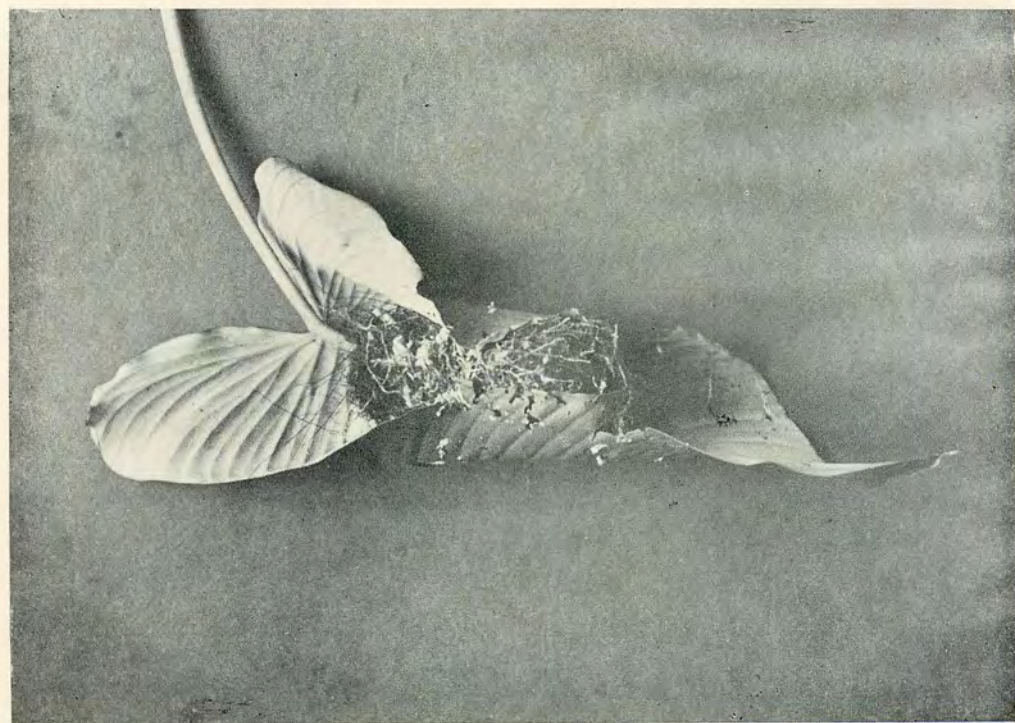
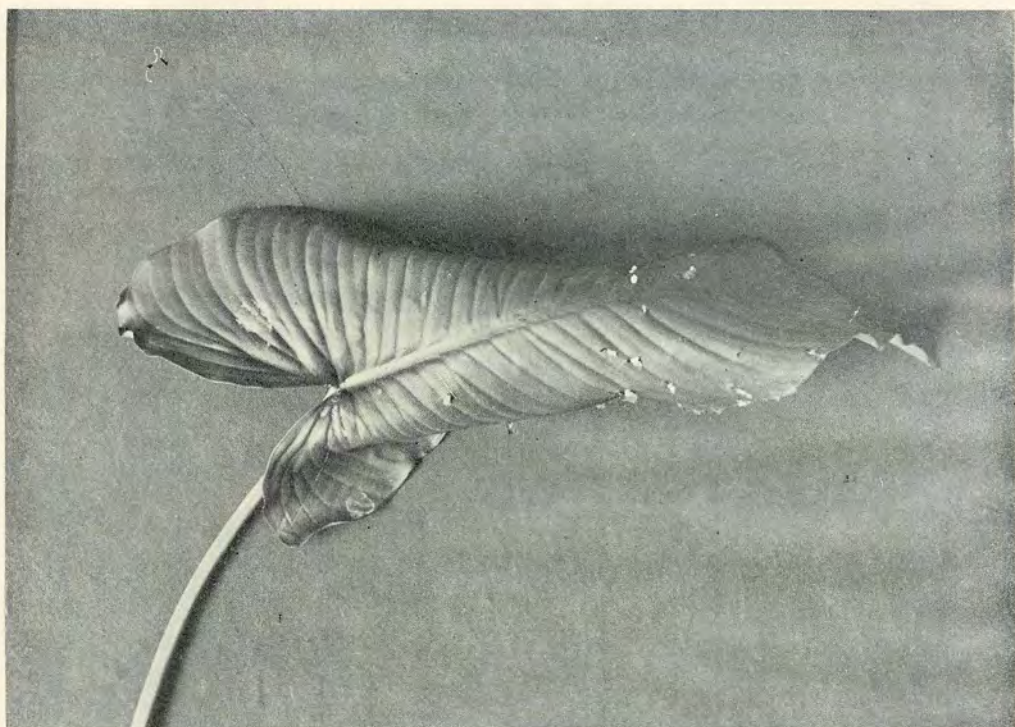
The nest is a small globular structure, with a small entrance near the top, resembling an ant's nest and is composed of fine dried grasses and other fibres, bound together with spider webbing, and similarly attached to the surrounding tall grasses. It is lined with small downy plant material and tiny pieces of lalang blades etc.

**N 199. *PHYLLOSCOPUS BOREALIS* subsp.**

Arctic Warbler.

This migrant was once seen in the reserve: a single bird on 14 January 1943 along a footpath through the heavy coastal jungle between the Njewaän and the Tjidaon area. Although not really rare at low altitudes it is certainly commoner higher up and this may explain its rarity at Udjung Kulon.





The nest of *Orthotomus sepium sepium*, Ashy Tailor-bird : two views.





**General remarks.** A common, though rather inconspicuous migrant in Java up to at least 1,500 m. in almost any habitat as long as there are a few trees, but preferring forest edge where it often occurs with mixed species (or drongo-) flocks.

**B 200. *PRINIA INORNATA BLYTHI* (Bonaparte) Wren-Warbler.**

A single bird was seen on 21 August 1941 in an area of high bulrushes bordering a monsoon marsh in the Niur region. There is rather little really suitable habitat available for this species in the reserve.

**General remarks.** Occurs over much the same range, and in much the same habitats, as *Cisticola exilis* but is commoner and more confiding, favouring boggy plains and flooded areas—and it is common in the ricefields which cover so much of the lowlands in Java.

The commonest call is a shrill “tjie-tjierrrrrrrr-roowiet”, also “tierrrrlet” repeated several times and resembling the song occasionally uttered by the following species.

The nest is an oval structure with the entrance in the top, very solidly attached to the surrounding leaves of low vegetation and composed of narrow strips of tough grass-like blades. It is unlined. The usual site is low vegetation, often in ricefields (Bartels 1929a).

**B 201. *PRINIA POLYCHROA* (Temminck) Javan Wren-Warbler.**

Uncommon but less rare than the preceding species. Most records are from open plains covered with lalang grass or a similar cover of grasses or herbs, dotted with patches of shrubs and weeds, in the Djaman-Niur region and the Tjidaon-Tjidjungkulon area. Usually alone, sometimes in pairs and often betrayed by the loud, characteristic call.

**General remarks.** Occurs over the same range, and in much the same habitat, as *Cisticola exilis* and the following species but seems to prefer lalang covered areas with a predominance of weeds and shrubs. Shy and elusive it keeps to thick cover, particularly where it shares its habitat with *P. familiaris*, is rather silent, and occurs alone or sometimes in pairs or small family groups.

The call is a rather loud "twie-ie-ie-ie-iet" or "tjeuk-tjeuk", but it also emits calls like those of the preceding species.

The nest is often in lalang or clumps of weeds and is always close to the ground. Although like the nest of *P. familiaris* it differs in the lack of leaves sewn to the thin walls.

**B 202. PRINIA FAMILIARIS OLIVACEA** (Raffles)

Bar-winged Wren-Warbler.

In behaviour resembles the two preceding species but in habitat and range similar to *Copsychus saularis* (No. 192) and although there is an abundance of suitable habitat in Ujung Kulon it is not very common.

**General remarks.** One of the most familiar garden birds of Java, occupying much the same habitat as other common birds such as the bulbuls *Pycnonotus goiavier* and *P. aurigaster*, the Straits Robin and the Fantail-Flycatcher.

The call is a high-pitched "twie-twie-twie-tie-tie" "tijk-tjik-tjik" or "tjwiet-tjwiet-tjwiet".

The domed, oblong nest is sewn to the leaves of the surrounding weeds, shrubs or trees and is composed of grassblades, small stalks, rootlets, arèn palm fibres etc. lined with finer material and bound together with much spiders webbing. The entrance to the nest chamber is at the top. The nest is usually placed in weeds or shrubs, less than two metres from the ground (Hoogerwerf 1948d)

**Family ARTAMIDAE**

**B 203. ARTAMUS LEUCORHYNCHUS AMYDRUS** Oberholser

Swallow-Shrike.

Not common in the reserve, despite the suitable habitat widely available.

**General remarks.** Common in many cultivated parts of Java, up to at least 1,500 m., congregating in small flocks, perching close together on exposed points like the tops of palm leaves and leafless or dead treetops, from which they survey the surrounding area and dash out after insects



which are caught in mid air. Thus the cleared or cultivated lowlands are an ideal habitat whether densely populated or not, and, in Udjung Kulon too, they favour pastures, the surroundings of marshes and swamps and tall njamplung trees in the coastal belt. Their behaviour and their loud calls render them conspicuous.

The call is a harsh, carrying "tie-tie-tjèw-tjèw-tjèw" or "tjèw-tjèw" often uttered during flight.

The nest is rather like that of the shrikes, a rough cup-shaped structure of thin twigs, interwoven with tendrils, grass stalks etc. and lined with similar fibres and blades. It is usually built in medium sized trees and palms, high above the ground, on a forked branch or in the cleft of a palm (Bartels 1926, Hoogerwerf 1965c).

### Family LANIIDAE

#### *B. 204. HEMIPUS HIRUNDINACEUS* (Temminck)<sup>1</sup>

Black-winged Pied-Shrike.

Most records are from the forest between Njewaän and Tjidaon, and from the forest edge near Java's First Point and from trailsides elsewhere. Usually in pairs or small parties often with drongo-flocks, quietly hunting amongst the foliage or sallying out like a flycatcher. The habitat is chiefly forest edge where it lives amongst the thin foliage of medium sized trees and occasionally climbs to the crowns of the forest giants, but it also occurs in scattered trees in open country.

**General remarks.** Ranges from sea level to over 1,500 m. but is apparently more common in the upper levels of this range frequenting the same habitat as that described from the reserve.

The call is a coarse "tù-tù--tù-tù", "hie-tie-tie-tiet" or "hie-toowiet" alternating with a higher pitched "tjiet-wiet-wiet-wiet-wiet".

The nest, usually high up, is often built on a forked branch, amongst thin foliage but well hidden. It resembles the nest of *Pericrocotus cinnamomeus* but is smaller and is composed of finer material, almost completely coated with a thick layer of spiders' webbing and decorated with small pieces of lichen so that the nest is almost impossible to tell from the branch to which it is attached.

1) It is more generally considered today that *Hemipus* is a close relative to *Coracina* and *Lalage*, and is thus a member of the Campephagidae (see Nos. 165-168). Ed.

**N 205. *LANIUS CRISTATUS SUPERCILIOSUS* Latham**

Brown Shrike

Only three post-war records from the reserve, but rather more from pre-war years; most records relate to single birds and to the Tjidaon pasture and the Djaman-Niur region. There is only one record during the northeast monsoon—one on July 12, 1955.

**General remarks.** During the south-west monsoon a fairly common migrant to the lowlands of Java up to about 800 m., favouring open country dotted with low trees or shrubs on which it perches in the open a few metres up, swooping onto its prey . . . be it insects caught in flight or lizards trapped on the ground.

Usually silent in its winterquarters but occasionally a repeated "tzi-tzi-tzi" is produced, and once a soft, sweet song was heard. In Java semi-adult birds considerably outnumber adults.

**B 206. *LANIUS SCHACH BENTET* Horsfield** Grey-backed Shrike

Only two records pre-war, rather more later but still uncommon and in total recorded less often than the Brown Shrike: although two were seen on August 21, 1956 and several were seen in the same area on July 12, 1955 the species is certainly not resident in this area.

**General remarks.** Its range and habitat in Java are about the same as those of the Swallow-Shrike, *Artamus leucorhynchus* (No. 203), though in the eastern parts of Java it occurs higher up. In habits it resembles the preceding species, though more often perching higher and better concealed than the Brown Shrike.

It utters a series of harsh, unmelodious screeches "tèrrrr" or "towèt", and it is also a skilled mimic of other birds.

The nest (Plate XXIV. fig. 2) is untidy, but thick-walled and solid, placed in the branches of shrubs and trees within a few metres of the ground and usually, but not always, well hidden. It is composed of coarse plants, particularly stiff, often flowering, grass stalks with the roots still attached, and is lined with finer fibres and rootlets. This species is the most common host parasitised by *Cacomantis variolosus* (No. 132).



**B 207. *PACHYCEPHALA CINEREA VANDEPOLLI* Finsch****Mangrove Whistler**

Fairly common and widely distributed in the reserve, occurring in forest, including primary forest and mangrove particularly where the undergrowth is scanty, and less often in open forest and even open country dotted with trees and shrubs. A quiet elusive bird usually found alone or in pairs and heard more often than seen. Feeds a few metres up, or higher, much like the flycatchers or flycatcher-shrikes (genus *Hemipus*)

**General remarks.** Widely distributed but uncommon and erratic in occurrence in Java up to about 800 m., not, as reported elsewhere, limited to the coastal belt or the tidal forests, but occurring in open secondgrowth on uninhabited coral islands and on the mainland in bamboo or palm groves further inland (as at Bogor Botanic Gardens), in native fruit gardens in the foothills and even higher in the mountains. Its true status is hard to assess as it is such a quiet, elusive, bird and even its loud, typical call is not often heard.

It produces a melodious, noticeable whistle "hiet-tjiewiet", "tjie-ie-ie" or "hie-ie-twiet" not unlike the call of *Rhipidura javanica*.

The nest is attached to a forked branch in trees, shrubs or bamboo, usually very well hidden and only a few metres up; it is a solid, though rather thin-walled structure of rootlets—usually mixed with grass blades—interwoven with some small dry leaves, inconspicuously matted outside with spiders' webbing, and lined with finer material such as hair-like plant fibres (Hoogerwerf 1963a).

**Family SITTIDAE****B 208. *SITTA FRONTALIS SATURATION* Hartert****Velvet-fronted Nuthatch**

Few certain records from the reserve but the bird may be commoner than such records indicate; all such records were from primary forest or its edge, always high up in the trees—and it is this that hampers any assessment of its status—and often with drongo-flocks. In July 1955 two specimens were collected between Njewaän and Tjidaon and they differ somewhat from birds collected elsewhere.

**General remarks.** Widely distributed in Java up to at least 1,500 m. but not really common, although it is more cosmopolitan in habitat than in Ujung Kulon, occurring in tidal forests and fruit gardens as well as primary forest and its edge.

Feeding whilst constantly on the move, high up in the trees, it utters incessantly a penetrating high-pitched call "sit-sit-sit-sit-sit" or "tsjèrè-tjie-tjie-tsie".

It nests in hollows or holes in the trees like the Great Tit but high up. The nest is composed of a large quantity of soft material such as moss, seed down, fibres, animal hair, feathers and fragments of pellets of owls and other raptors (Hoogerwerf 1955c).

#### Family DICAEDAE

##### *B 209. DICAUM TROCHILEUM TROCHILEUM* (Sparrman)

Scarlet-breasted Flowerpecker.

Although rather common in most of Java, not so in Ujung Kulon where it was recorded more often pre-war than in recent years, favouring the same habitats as *Lalage nigra* (No. 166) and *Pericrocotus cinnamomeus* (No. 168) and many bulbuls and other species but favouring open country. Within this general habitat it frequents clumps of parasitic *Loranthus* or *Viscum*, feeding on the berries. Usually found alone or in pairs, sometimes in small flocks—and often first noticed when in flight quite high up and calling.

**General remarks.** In range and habitat resembles many other common Javan species known from the cultivated parts and the marginal areas. Very active and rather solitary, it is constantly on the move, calling in flight, from one clump of mistletoe to the next. Mistletoe berries form the main food of the species. Once a newly captured bird defecated 72 seeds of these berries, which were all glued in the usual way to a small branch.

The call is a sharp, high pitched, "tjie-lie . . . tjie-lie", a drawn out "tjieie" or a loud "tùrrrr-tùrrrr" or "trrrrû".



The nest is a small pear shaped structure with a small hooded entrance in the upper front side, firmly attached on top to a twig or the stem of a large leaf, usually well above the ground; composed of downy plant material, coated with a thick layer of the thin scales of the rhizomes of *Davallodes* ferns, or of the coarse hairs of leaf-stalks and young twigs of *Hibiscus macrophyllus*, bound together with spiders' webbing mixed with brownish castings of larvae and caterpillars (Hoogerwerf 1965c).

**B 210. *DICAENUM TRIGONOSTIGMA FLAVICLUNE* Hartert**

Orange-bellied Flowerpecker.

Apparently relatively scarce in the reserve, and most observations are based on the characteristic call, but its predilection for the canopy and its solitary habits may accentuate this appearance. Although it resembles the previous species in behaviour in habitat it prefers denser forest including primary forest, albeit the two overlap at times.

**General remarks.** Not discovered in Java until around 1900—some 120 years later than its discovery in Malaysia—and this indicates its scarcity: though it is not truly rare. Although in general it occupies the same range as the preceding species it tends to favour higher elevations and denser forest; in habits it is perhaps more gregarious and it keeps more to the canopy.

Although some calls resemble those of the preceding species the flight calls are distinctive: a piercing "hie-tie-tie-tie-tie" or "tschè-tie-tie-tie-tie-tie-tie".

The nest resembles that of *Dicaeum trochileum* but is larger. Much of the downy material is replaced by snippets of paper resembling scales found in the basal parts of treefern leaves and on the rhizomes of the common ferns, matted together with spiders' webbing and decorated with some scraps of moss and lichen. Lichen and cobwebs are also used to attach the nest to the surrounding vegetation, often to the thick ribs of treefern leaves (Hoogerwerf 1965cc).

## Family NECTARINIIDAE

**B 211. *AETHOPYGA MYSTACALIS MYSTACALIS* (Temminck)**

Scarlet Sunbird.

Rather few records from the area, but it is an elusive bird, keeping to the dense foliage and with a rather soft call so it may well have been overlooked to some extent. It was found along trails through, and at the edge of, primary forest and low down amongst flowering weeds and shrubs dotted about in more open areas. Usually alone or in pairs, but sometimes found flocking with other insectivorous species.

**General remarks.** This tiny sunbird ranges up to at least 1,500 m. in Java, occurring locally and preferring the higher elevations. Its habitat throughout Java is like that in Ujung Kulon but it also occurs in wastelands, deserted agricultural plots, cultivated plains and even towns and villages.

The fine shrill call "tjiet-tjiet" or "tsjiep-tsjiep" somewhat resembles that of *Anthreptes malacensis* (No. 214) but it is much softer.

The nest is pear-shaped with a well hooded entrance in the front upper part, composed of soft, light-coloured seed down, coated with a thin layer of fibre interwoven with scraps of stalks and the bark from tiny twigs etc. bound together with spiders' webbing—which is also used to suspend the nest from the weeds or low shrubs in which it is usually placed.

**B 212. *NECTARINIA SPERATA BRASILIANA* (Gmelin)**

Van Hasselt's Sunbird.

Not very often seen, but it may be more common than such records suggest. Appears to occupy the same range and habitat as the preceding species but more often found on low flowering shrubs in the open, particularly on flowering *Stachytarpheta* sp. at the edge of the small Njewaän pasture. Usually alone but sometimes seen in pairs.

**General remarks.** More of a lowland bird than the previous species, ascending the hills to about 800 m., frequenting tidal forest and its surroundings, clumps of trees, palms or bamboo in cultivated areas and forest edge. Its behaviour is that of the family, but it is a shy bird with secretive habits.

Its call a soft "tsjiep-tsjiep". It also produces a fairly loud song.

The nest and nestsite are not known to the author from Java.



**B 213. NECTARINIA JUGULARIS PECTORALIS** Horsfield

Yellow-breasted Sunbird.

This sunbird is usually conspicuous where found but it was not so in Udjung Kulon and it is probably less common than elsewhere in Java, although—together with the following species—the commonest sunbird in the reserve. It was fairly common in the belt of secondary vegetation and tidal forest that virtually surrounds the sanctuary.

**General remarks.** Jointly, with the next species, the commonest sunbird in Java, occurring in the habitat occupied by such other common species as *Rhipidura javanica*, *Pycnonotus goiavier*, *Copsychus saularis* and *Prinia familiaris*. Its behaviour is typical of the sunbirds—a very lively bird, constantly in motion and hard to overlook in its open habitat, feeding both in tall trees and—perhaps preferentially—on low shrubs and bushes or weeds. Often seen on flowering plants in parks and gardens in towns and villages, and although nectar forms a major part of its diet it also spends much time searching for small spiders, caterpillars and other small insects. Usually seen alone or in pairs but occasionally in flocks and sometimes with mixed species flocks.

The call is a loud, high-pitched “tjiewiet-tjiewiet” or “tjiep-tjiep-tjiewiet”. Occasionally a soft sweet song is uttered.

The nest resembles that of most other sunbirds but it invariably has a tailpiece. It is composed of dried plant matter like bamboo leaves, grass blades, bamboo scales, fibres, seed down (often that of lalang grass) cocoons of caterpillars etc., rather loosely bound with spiders' webbing and lined with woolly seed-down interwoven with thinner grass blades etc. It is suspended with spiders' webbing from a twig or thin branch in a tree or shrub, often close to, or overhanging, a brook, stream or swamp. Usually not more than a few metres up. Locally many have been seen hanging from telephone wires running parallel to the highway (Hoogerwerf 1965c).

**B 214. ANTHREPTES MALACENSIS MALACENSIS** (Scopoli)

Brown-breasted Sunbird

Found in the reserve in all habitats outside the primary forest and always high above the ground, particularly favouring coconut palms but

judging by the author's experience elsewhere in Java the rather infrequent occurrence of this sunbird in Udjung Kulon cannot be caused by the scarcity of these palms. Usually found alone or in pairs but sometimes seen with mixed species flocks along the forest edge.

**General remarks.** Closely parallels the preceding species in range and habitat although it is perhaps more a bird of the coastal belt. In habits it is also similar but it rarely comes as low down, is perhaps more solitary and less often found in mixed flocks—except on flowering trees. Anyway one of the commonest birds of Java, resident in many towns and villages.

The call is a loud, penetrating, high-pitched and drawn out “twiet-twiet-twiet” which often betrays the presence of the bird; other calls include “tjie-tjie-tjie” or “tjiet-wiet-tjiet-wiet”.

The pear-shaped nest resembles that of *Dicaeum trochileum* but is much larger, is composed of grass blades, rootlets and fibres interwoven and inconspicuously bound with spiders' webbing, lined with seed down—which is often clearly visible through the thin walls. The entrance—often hooded—is in the upper front, usually bordered with cobwebs. Cobwebs are also used to attach the nest to the surrounding foliage. Generally 4 to 8 metres up it is occasionally found higher—frequently the trees chosen also hold the nests of the large ants *Occophilla smaragdina*. (Hoogerwerf 1966cc.)

**B 215. *ANTHREPTES SINGALENSIS BANTENENSIS* Hoogerwerf**  
Ruby-cheek.

Comparatively rare in the reserve, favouring forest edge and occasionally penetrating well into the primary forest in the hilly interior, frequenting the dense foliage of medium-sized trees and the understorey, behaving rather like *Hemipus hirundinaceus* (No. 204) or some of the white-eyes—and not like the two preceding species. The birds of Udjung Kulon are subspecifically distinct from those found elsewhere in Java.

**General remarks.** A local resident in Java, ranging as widely as the preceding species but favouring the quieter areas and the lowlands particularly shady spots. Because of its elusive habits it seems nowhere to be common.



Its call is rather similar to that of the preceding species.

The nest resembles that of the species above but it is made of coarse, almost black and often very long, clinging rootlets interwoven with lighter coloured blades, stalks and fibrous material, lined with finer fragments; the whole bound together with quantities of spiders webbing, and decorated with numerous spiders egg-bags. The top of the nest is attached to a leafy twig or branch at various heights—but usually low—and there is a well hooded entrance in the upper front (Hoogerwerf 1967a).

**B 216. *ARACHNOTHERA LONGIROSTRA PRILLWITZI* Hartert**

Little Spiderhunter.

Widely distributed but erratic in occurrence despite the abundance of stands of wild bananas, gingers and other choice spots for this species; where it does occur it is amongst such growths in clearings in, and at the edge of, primary forest.

**General remarks.** Occurs from the hot lowlands up to at least 2000 m. in the mountains and appears to favour the higher elevations. Whilst it favours particularly the habitat where it occurs in Udjung Kulon it also occurs in the cultivated lowlands and into towns and villages where it is particularly attracted by clumps of bananas. Here it is more easily seen than in the forest where usually it is only glimpsed, though it calls repeatedly from cover—unseen until it darts to the next clump. Almost always found singly, save at flowering trees when alone or in small flocks this species may occur with several other small birds.

The call is a repeated, high-pitched “tjieuw-tjieuw” or “tjie-tjie-tjie” and the alarm call, often given in flight, is a raucous “tjieiet” or “tsjek-tsjek”.

The nest is one of the most remarkable amongst Javanese birds: it is a small hammock-like structure with its edges sewn to the central part of the underside of a broad leaf, of such plants as Amaryllidaceae, Musa or Zingiberaceae, hence clearly rather close to the ground. The nest contains a threshold and then an egg chamber and the entrance—through the threshold—is a tiny opening (so close to the roof that the birds back must touch the rib of the leaf when entering) facing towards the tip of

the leaf. Thus not only is the nest hidden under the apex of the leaf but the position of the entrance and the egg chamber combine to prevent eggs or young from falling out, even when the leaf itself is caught in a strong wind. From above the nest itself is invisible, but two small rows of gossamer points outline its position. From below the nest resembles that of certain species of ants, and this no doubt gives it added protection. It is composed of thin grass blades, plant fibres etc. mixed with coarse hairlike palm fibres (e.g. arèn) and wrapped in dead leaves, then coated with a layer of leaf skeletons and bound up with spiders' webbing, which is also used to stitch it to the leaf, under which it makes a mass some 20-25 cms. long, 8-14 cms. broad and 5 cms. deep.

**B 217. *ARACHNOTHERA AFFINIS AFFINIS* (Horsfield)**

Grey-breasted Spiderhunter.

Apparently less common than the above species; perhaps feeding more often in the open, and higher above the ground, and less tied to the area of the plants that the Little Spiderhunter favours but otherwise very similar in habitat preference and behaviour. Usually alone or in pairs, but sometimes more together and on August 2, 1955 about ten were found together feeding on insects and nectar in a tall *Erythrina variegata* along the coast in the Tjidaon region.

**General remarks.** Occupies much the same habitat and range in Java as the Little Spiderhunter but is known to reach the mountain summits, over 3000 m. up. It is perhaps rarer in the lowlands and the cultivated areas, but it is less elusive. Both species are more often heard than seen.

The call of this species is however clearly different, more raucous in pitch, a harsh penetrating "tie-wie-tie-wiet. . . . tie-rie" "tie-rie-rie-rie" or "tûr-ûr-ûr-ûr-ût"; another call is "tjie-tjie-tjûr" or tsjiek-tsjiek"; yet sometimes its calls are similar enough to those of the preceding species to be mistaken.

The nest and nest-site are rather similar to those of the preceding species but the nest averages smaller and looks quite different, as it is almost wholly composed of brown plant fibres, perhaps chiefly originating from decaying palm leaves, dried rotan leaves or similar material. \* No leaf skeletons are used.



## Family MOTACILLIDAE

*N 218. MOTACILLA CASPICA MELANOPE* Pallas Grey Wagtail.

Only found in the Djaman-Niur area and the Tjigenter pasture on arid or semi-arid plains and all records are from September and October; as the favourite habitat in Java in winterquarters is shingle banks or stony shallows along brooks or streams in the mountains and in view of the dates, the species can be safely considered a passage migrant only, in the reserve.

Multiple records include a party of about 15 in the Djaman area on 28 October 1942 and five on one of the dry Niur pastures on 17 October 1952.

**General remarks.** A regular visitor to Java found both in the lowlands and up to the mountain summits, chiefly along stream beds but also on dry alpine meadows and similar plains, visiting the lowlands really only in spring or fall on passage. Usually found a few at once, but occasionally in large flocks otherwise behaving like the European subspecies.

*N 219. MOTACILLA FLAVA* subsp. Green-headed Wagtail.

Occurs in the reserve at about the same time, and about as frequently, as the Grey Wagtail but in a different habitat. Only definitely found in the Djaman-Niur area where it occurred in boggy and muddy spots like the edges of the monsoon marshes, drying up swamps and waterholes. All records treated as definite relate to birds with distinctly greenish upperparts and yellow underparts—adults—but it was impossible to identify the subspecies involved.

**General remarks.** In Java in winterquarters these two wagtails do not differ much in range or behaviour but they do occupy different habitats, and although the Grey Wagtail does flock it never does so in the large numbers that this species sometimes does. Quite often it was noted that flocks of this species were composed of birds of the same sex. Several subspecies visit Java, but it is extremely difficult if not impossible to distinguish one from another in the field (Hoogerwerf 1963).

**N 220. *DENDRONANTHUS INDICUS* (Gmelin)** Forest Wagtail.

Only two definite records from the reserve. A single bird was seen along the open jungle-bordered path to Java's First Point on 16 January 1943 and another was recorded on the small Njewaän pasture, which was freshly burnt and is next to the forest, on 19 October 1952.

**General remarks.** An uncommon winter visitor to Java, found from sea level to at least 1,500 m. but perhaps preferring elevations above 500 m. Almost always alone or in scattered groups along jungle trails or in dry forest clearings; when found in the cultivated lowlands it does not seem shy. In behaviour it clearly resembles *Motacilla* spp., preferring perhaps the habitat of *Motacilla caspica*.

**B 221. *ANTHUS NOVAE-SEELANDIAE MALAYENSIS* Eyton** Richard's Pipit.

Again only two records from the reserve. One on January 17, 1943 feeding on the Tjidaon pasture, another on July 10, 1955 in a similar habitat in the Djaman area. Certainly not resident in the reserve.

**General remarks.** Wide ranging but erratic in occurrence in Java from the lowlands to the tops of the highest mountains, favouring meadows, wastes covered with low grass and other open plains near the coast, also further inland on dry paddyfields and in the remote uplands on freshly burnt lalang plains and on broad mountain plateaux over 200 m. up. Usually alone or in small parties.

The call, resembling that of most pipits, is a high-pitched "tsjep-tsjiep" or "tsjriet-tsjriet".

Nest and nest-site do not differ from that of *Anthus pratensis* in Europe (Hoogerwerf 1962c).

**Family PLOCEIDAE**

**B 222. *PADDA ORYZIVORA* (Linnaeus)** Java Sparrow.

Only one record from the reserve: a single bird seen on the Tjigenter pasture on 6 July 1955.



**General remarks.** One of the most common species in the cultivated parts of Java, up to at least 1,500 m. but with a strong preference for the lower elevations especially in the rice plains where it is almost always found around houses. This attraction is lacking in Udjung Kulon and may explain its scarcity there. Sociable, gregarious and audacious; flocks often raid standing crops of maize, rice etc., as well as the storage yards for such grains; this habit seems to tie in with great fluctuations in the levels of local populations. Roosting flocks tend to be very large indeed; at such sites, in tall trees or palms in towns or villages or in shrubs, reeds or sugarcane out in the country, they are caught in hundreds both for export as cage birds and for food. The species is not very noisy; its call is a rather quiet "treu-treu" or "turr-r-turr-r". The nest and nest site resemble those of the European House Sparrow; it is found under roofing tiles, in all sorts of niches in houses, in holes or hollows in trees or palms etc.,

**B 223. *LONCHURA LEUCOGASTRA LEUCOGASTROIDES***

(Horsfield & Moore)

White-bellied Munia.

Originally erratic and local in the reserve it now seems an established resident. At first single birds or pairs were found but by September 1942 small flocks were seen in the Tjigenter region. Until 1942 only recorded from that area but since then spread, appearing in the Tjikarang area in January 1943 and after the war in the Tjidaon pasture and along the south coast.

**General remarks.** Like other munias virtually limited to the cultivated areas, from sea level to at least 1,500 m., but it does also occur in forested areas, feeding—not so much on standing crops—but on smaller graminaceous seeds, so that it is not uncommon in gardens. It also differs from most other munias by being less gregarious, usually being found in pairs, family parties or small flocks.

The call is a soft "tjie-ie-ie" or "pieie-iet". It also makes a soft chattering.

It builds a large domed nest, composed of plant matter, chiefly grasses and the like, loosely woven with a small entrance at the top, built in shrubs, trees, palms—often the axillaries of palm leaves—and epiphyte laden trees. Often quite high off the ground (Hoogerwerf 1951, 1962c).

## Family STURNIDAE

**B 224. STURNUS CONTRA JALLA** (Horsfield)Rose-coloured Starling.<sup>1</sup>

Seven records pre-war, none since, perhaps declining due to the rapid disappearance of open areas in the reserve. A maximum of four at one time, often in company with the following species and always on the game pastures and surroundings, feeding on insects disturbed by grazing game and occasionally perching on banteng, deer or wild boar searching them for ectoparasites. From the time of his first visit the author was struck by the scarcity of this species and undoubtedly had more birds been about they would have been observed.

**General remarks.** Widely distributed in the cultivated parts of Java from sea level to at least 1,500 m. inhabiting much the same habitat as *Rhipidura javanica*, *Pycnonotus giavier* and other common species, but particularly terrestrial in habits and favouring almost any kind of open country. Rather sociable and usually found in pairs or small flocks, occasionally in big flocks, particularly roosting in trees or palms and producing a tremendous hubbub audible some distance away. Noisy at other times too, mainly uttering an unmelodious twitter, but occasionally a soft, sweet song.

The nest is a hotch potch of coarse plant matter, grasses, roots, dried, leaves, seed-down, feathers, animal hair, paper, rags etc. The entrance is at the top. It is placed in palms—often at the axillaries—trees and shrubs or epiphytic climbers usually high above the ground.

**B 225. STURNUS JAVANICUS JAVANICUS** (Cabanis) Jungle Myna.

Regularly seen in the reserve, almost always in or near the game pastures, where it fed on parasites found on banteng, deer or wild boar or on insects disturbed by them underfoot; usually seen in small flocks but on 21 October 1937 there were 20 together and on 10 January 1941 at least 50 on Tjikarang pasture.

1. Usually called Pied Myna, whilst this vernacular name is often given to *Sturnus* (or *Pastor*) *roseus*. Ed.



**General remarks.** This starling too has an extensive range in Java, and in the eastern parts of the island it occurs up to at least 2,500 m., but it is erratic in occurrence and found in varying numbers. Chiefly a bird of cultivated areas, but more particular in habitat choice than the preceding species, it is terrestrial in habits and a well known seeker of ectoparasites on the backs of grazing cattle, around whose feet in also feeds on grasshoppers and other insects they disturb. It also frequents flowering and fruiting trees, being fond of nectar and many kinds of fruit; and is less often alone than *Sturnus contra*, most often associating in flocks of up to fifteen birds.

It makes a variety of harsh calls, of which the main one seems to be a far carrying "tjèt-tjèt-tjèt-gauw-gauw" or "tjilik-tjilik-tjilik-krèk-krèk-krèk-tjooiek-tjooiek".

It most often nests in hollows or holes in trees or palms, sometimes in the axillaries of palm leaves, in epiphyte laden trees and only occasionally close to houses: in such cases the nest resembles that of the preceding species but it averages smaller.

**B 226. GRACULA RELIGIOSA RELIGIOSA** Linnaeus      Grackle.

Not uncommon in the reserve, and occurring over a wide area: both in the coastal forest belt—favouring tall njamplung trees—and in the primary forest, particularly at fruiting trees. Usually seen in pairs or small flocks, and almost always keeping to the crowns of the trees: the largest flock noted in the reserve was of eight birds congregating in a tall tree along the Tjibunar, on the south coast.

**General remarks.** The Grackle population in Java may suffer, like such species as *Pycnonotus zeylanicus* (No. 175) and *Copsychus malabaricus* (No. 193), from its economic importance as a cage bird, favoured both locally and overseas, and this may explain its absence from wide areas of suitable habitat. It ranges up to 1,500 m. but prefers the lower elevations in the south of the island and avoids populous cultivated regions; it prefers forest edge, new clearings and deserted agricultural plots with scattered tall trees or palms but may penetrate far into the

forest after fruiting trees, on which it associates with other birds. Usually found in pairs, or in flocks of ten to fifteen birds but sometimes in larger flocks.

This bird usually found by its call, a loud "tioong" that carries is a great distance, but this is only one of an extensive repertoire ranging from a penetrating whistle to soft cackling notes. It is also a good mimic.

It usually nests in holes or tree hollows high up and often inaccessible to man (Hoogerwerf 1963).

**B 227. *APLONIS PANAYENSIS STRIGATUS* (Horsfield)**

Tree-Starling.

Fairly common and conspicuous in the reserve but certainly not met daily although it occupies a wide range within the belt of secondary forest, including the tidal forests. Most records are from the pastures and their surroundings and from the mangroves. A sociable bird, associating in flocks rarely of less than five birds, and sometimes quite large: a large flock was flushed from a huge gebang palm by an Osprey on October 10, 1937; at the Tjigenter pasture on January 3, 1943 there were about 30 including many young birds; and on November 9, 1954 there were several flocks of about 20 each in the Niur area. An arboreal species, preferring tall trees and rarely if ever descending to the ground.

**General remarks.** Widely distributed up to 1,500 m.—considerably higher in the eastern parts of the island—occurring in open, well forested country and forest edge, and, providing sufficient flowering or fruiting trees are available, in densely populated areas and even into the towns and villages. Although fruit is the most important item in the diet, this starling also feeds on nectar and insects, which are caught in mid-air. In behaviour it somewhat resembles the preceding species being both arboreal and gregarious.

The usual call is a high-pitched, penetrating "tjieuw-tjieuw" most often uttered in flight.

It nests in holes in trees or palms, but sometimes makes untidy nests in epiphytic growths and even in rock crevices (Hoogerwerf 1951, 1965c).



## Family ORIOLIDAE

*B 228. ORIOLUS CHINENSIS MACULATUS* Vieillot

Black-naped Oriole.

Judging from the number of records this is not common in the reserve despite an abundance of suitable habitat in the belt of secondary vegetation separating the coastal fringe from the hilly interior. Most observations are from open pastures and of single birds.

**General remarks.** Fairly common in many parts of Java, found in mountain tea-gardens, rubber estates and teak forests in the lowlands, tidal forest and coconut plantations along the coast, but always where there are tall trees or palms without the continuous canopy of primary forest. Usually seen alone or in pairs, but sometimes more—the author once saw a flock of fifteen—and occasionally flocking with other birds in fruiting or caterpillar infested trees. It generally stays well hidden in the foliage of these tall trees but betrays itself with its loud characteristic call.

The call resembles that of the European Golden Oriole (*Oriolus oriolus*), it is a melodious “klie-ie-ieuw”, “lie-tieuw” or “kie-lie-lie-tieuw” that carries quite a distance, alternating with the mewing “auw-giauw” of the female.

The nest also resembles that of its European congener, usually well hidden amongst dense foliage high up, though sometimes it is low down and even in low shrubs. It is a cradle-like structure attached to a horizontal forked branch and composed of coarse plant matter, entwined with finer plant fibres, bamboo leaf-scales, dried leaves etc. and lined with hair-like palm fibres (often arèn palm), stalks and strips of leaves (Hoogerwerf 1963a).

## Family DICRURIDAE

*B 229. DICRURUS MACROCERCUS JAVANUS* Kloss Black Drongo.

Only seven records from the reserve, four of them post-war. Except for one bird found in tidal forest at Handeuleum Bay all records are from the Djaman-Niur area, and all are of single birds. From these few irregular records it is safe to assume that this rather conspicuous species is not a permanent resident.

**General remarks.** Rather plentiful in many parts of Java up to 1,500 m. but especially in the cultivated plains. In habitat, and in behaviour up to a point, resembles the kingfisher *Halcyon chloris* (No. 106), inhabiting open country with scattered trees and bushes or with fences or telephone wires or even the ruins of an old barn to offer it a vantage point from which to keep a clear view. From such points it sallies after insects, performing all manner of bee-eater like aerobatics or stooping to catch prey on the ground like some of the kingfishers. It also catches termites high in the air like the swallow-shrikes, and behaves like a sunbird when gathering insects or nectar from flowering trees or shrubs as like so many other species it is fond of nectar. This behaviour, its boldness and its black plumage make it one of the most conspicuous birds of the cultivated parts of Java, and it is likely to be one of the first species met by a visitor to the island. Outside the breeding season it is usually found singly, but in particularly good feeding conditions flocks are found.

Like most other drongos it has an extensive repertoire of loud, far-carrying calls such as "tjie-luu-luu", "tjèw", "teluu-wie-wiet" or "tjipret-iesook-iesook-tjipret" and a screeching "tjokke-tjok . . . wak-ke-wak". It is also a skilful mimic of other birds.

The nest, usually high up, is well concealed in a thinly leafed tree; more rarely it is found in almost leafless trees or in low shrubs. It is rather like the nests of the *Campephagidae*, a small, rather flat structure with a shallow nest hole, composed of long, coarse plant fibres, rootlets, small twigs, leafribs etc. and decorated outside with small scraps of moss and lichen, bound with spiders' webbing which is also used to attach it to a horizontal, and usually forked, branch.

**B 230. *DICRURUS PARADISEUS FORMOSUS* (Cabanis)**

**Large Racquet-tailed Drongo.**

Common in the reserve in primary forest, other well-wooded parts and, particularly in forest edge, clearings and along trailsides, also occurring in open places with belts of trees and a fairly regular visitor to the mangroves. Most records relate to one or more associating with flocks of smaller birds travelling through the foliage of the taller and the lower trees.



**General remarks.** This species ranges from sea level to at least 1,500 m. preferring the lower elevations and occurring in the kind of habitat described from Udjung Kulon, nearing houses only when tall cover is close at hand. It is hard to imagine greater differences between the habitat and behaviour of this species and the preceding one. Usually wary and elusive it feeds in or near leafy trees—often very high up—and behaving more like a flycatcher than the Black Drongo, but it does sometimes, like the Black Drongo, perch in exposed places and prey on flying insects and it also frequents thinly leafed flowering trees (almost always near denser cover) together with other nectivorous species. Single birds are less common than pairs or small groups travelling through the forest with a flock of smaller birds. Its far-carrying screaming alarm call seems to alert the whole flock and gives the impression that the drongo is the leader of the mixed species flock... hence the term 'drongo flock'. Its nomadic habits make it erratic in occurrence.

A very vocal bird, it has a wide variety of loud, far-carrying shrieks and sharp shrill whistles including such typical ones as "tiek-telokkk" or "tiek-tolok-kè", "wiet-wiet" and "tok-tok". It also has a melodious song and is a competent mimic.

The only nest seen by the author was attached to a horizontal, forked branch of a sapling in forest edge, a few metres up and well hidden amongst the foliage. It resembled that of the preceding species and was mainly composed of very thin twigs, blades and woody fibres lined with many corkscrew-like clinging tendrils matted together with an abundance of spiders' web (Hoogerwerf 1965d).

#### Family CORVIDAE

##### B 231. *CORVUS MACRORHYNCHOS MACRORHYNCHOS*

Wagler

Large-billed Crow.

A rare non-resident: only six records from the reserve. All records, of single birds or pairs, are from the pastures except for two birds seen along the south coast feeding on a dead fish. On September 8, 1942 this species was recorded from the Tjigenter pasture at the same time as, though not associating with, the smaller *Corvus enca*. Its behaviour was typical of the family and it was almost always in the open where it could keep a good look out.

**General remarks.** Erratic in occurrence and numbers over a wide range up to at least 1,500 m., especially along the coast and in the cultivated parts of the island, particularly in the lowlands and foothills. It omnivorous and scavenging habits take it into almost any habitat, though rarely into thick forest. A terrestrial feeder, usually found in pairs or small flocks, though given very favourable feeding conditions it may gather in large flocks. Fifty years ago about 1,500 were found near Semarang (Central Java) around the carcass, several days old, of a wild boar.

The usual call is a gloomy, hoarse "â-ok . . . â-ok", "chaha-chaha", "cha-cha-cha-cha" or a drawn out "aaah-aaah".

The nest is a typical crow's nest—a huge, solid structure with a large quantity of branches, roots and other coarse plant material as its base, whilst the nest itself is composed of much finer material, chiefly palm fibres (especially arèn palm). It is almost always placed in a tall, frequently unclimbable tree; the well forested village cemetery is a favourite location. This species is host to the eggs of *Eudynamys scolopacea* (No. 134) (Hoogerwerf 1948c).

**B 232. *CORVUS ENCA ENCA* (Horsfield)      Slender-billed Crow.**

Unlike the previous species a fairly common permanent resident in the reserve. It does not scavenge but is chiefly arboreal feeding on fruit and insects and occasionally on nectar. Although usually seen in the belt of secondary vegetation surrounding the hilly interior it was also often found in primary forest feeding on fruiting forest giants and it was a regular visitor to the game pastures where, like the Jungle Myna, it would perch on banteng or deer in search of ectoparasites. Rather noisy and sociable, being usually seen in small flocks, but sometimes up to twenty at once in fruiting trees or palms.

**General remarks.** This smaller crow shares the range of the previous species but seems to prefer the higher elevations and in the eastern part of Java it is even found near the summits of the highest mountains, but it favours forested areas, often occurring deep in primary forest, and in some places visiting cultivated areas, and raiding fields planted with beans, pecnuts and other interesting crops. Its feeding habits have been



outlined above and because of them it is nomadic and erratic in occurrence and numbers. Usually found in small flocks, rarely alone. Noisier and less shy than the Large-billed Crow, its usual call is perhaps a flocking call—making or maintaining contact with its fellows.

Its call is more agreeable than that of the preceding species: it is a repeated “kēēēēē” or “āk-āk-āk” usually uttered in flight.

Nest and nestsite resemble those of the preceding species but are almost always in forest or forest-edge in tall trees, and are smaller. This crow is also a foster-parent of *Eudynamys scolopacea*.

**B 233. *CRYPsirina temia temia* (Daudin)**

Racquet-tailed Magpie.

Not common. Most records relate to single birds, but twice two were seen together and thought to be of different sexes, hence the species may be resident. Mostly seen in the belt of secondary growth within the Djaman-Niur-Njewaän sector and never in heavy forest. Its behaviour shows some resemblance to *Lanius schach* (No. 206) or *Dicrurus macrocercus* (No. 229) but it rarely ventures far from cover, staying in the outer foliage of large shrubs and low trees, particularly favouring clumps of bamboo.

**General remarks.** Erratic in occurrence over a wide range in Java up to 1,500 m. and probably relatively scarce, favouring open country at lower elevations dotted with scrub, bamboo and coconut palms etc. whether in populous areas or not. In habits it is rather like *Phaenicophaeus curvirostris* (No. 139), rarely covering long distances on the wing, but moving from tree to tree, and rarely descending to the ground or frequenting the crowns of tall trees. In flight its tail shape is characteristic. Usually alone, or sometimes in pairs or small parties, moving rather inconspicuously so that the harsh call attracts attention first.

This is a grating “tjēēēh-tjēēēh”. The alarm call is a hoarse “tschrēēēē-tshrēēēē” or “tjēēēt-tjēēēt”.

The nest is a small crow's nest mainly composed of twigs, rootlets, plant fibre etc. lined with arèn palm fibres, and usually placed in a clump of bamboo quite high up.

**Conclusion :**

This total of 233 species is about half that known from Java, including migrants, i.e. 460 species but a number of these do not occur in the lowlands, and consequently do not find suitable conditions in Ujung Kulon. In an earlier paper (Hoogerwerf 1948e) 225 forms were listed for Ujung Kulon but this was bolstered by two subspecies of each of two birds: *Charadrius mongolus* and *Sterna albifrons*; and a number of uncertain records. These have been omitted here but 32 species have been added here which have been recorded since then.

Kusnadi P. Satmoko (1961) recently published a list of birds said to occur here but the list is of doubtful value; amongst other things some twenty species listed are unknown from the reserve—one of them, *Milvus migrans*, not even being certainly recorded from the Indonesian archipelago, and several others being birds restricted to altitudes not found in Ujung Kulon (e.g. *Sphenurus korthalsi*, *S. oxyurus*, *Ptilinopus porphyrio* and *Brachypteryx* spp.), conversely many rather common and conspicuous birds are not listed (e.g. Nos. 3, 10, 46, 57, 112, 113, 135, 177, 214, 225 and 230 in this synopsis).

In the course of the author's many trips in the reserve a daily species record was always kept; the maxima recorded in various places were as follows:

63 species ... Tjikarang—Tdj. Alang Alang

64 species ... Tjigenter—Tjitelang

67 species ... Tjitelang—Djaman

74 species ... Niur—Tdj. Alang Alang

and the maximum recorded in one restricted location was 54 in and around the Tjigenter pasture. A daily maximum of 74 species, whilst less than that found elsewhere in Java (Hoogerwerf 1948e), is quite good for an area of only about 4,000 m. by 500 m.

Finally a few comments on four groups of birds for the benefit of future students of the birds of this area. Firstly a number of species, including some migrants marked with an 'x', that are not rare in Java generally have yet to be found in the reserve, e.g. *Anas gibberifrons*, *Accipiter soloensis*,<sup>x</sup> *Halcyon sancta*, *Dendrocopos macei*, *Acrocephalus*



*stentoreus*,<sup>x</sup> *Megalurus palustris*, *Phylloscopus occipitalis*,<sup>x</sup> *Parus major*, *Zosterops palpebrosa*, *Nectarinia calcostetha*, *Passer montanus*, some species of *Ploceus* and *Lonchura* and *Dicrurus leucophaeus*. Secondly the absence of a number of less widespread species, which would nonetheless be expected here, is hard to explain, for example *Rallina fasciata*, *Threskiornis melanocephalus*, *Plegadis falcinellus*, *Chrysococcyx basalis*,<sup>x</sup> *Chrysocolaptes strictus*, *Mülleripicus pulverulentus*, *Muscicapa mugimaki*,<sup>x</sup> *Saxicola caprata*, *Turdus obscurus*,<sup>x</sup> *Zoothera sibirica*,<sup>x</sup> *Tephrodornis gularis*, *Lanius tigrinus*,<sup>x</sup> *Dicaeum concolor*, *Aethopyga siparaja* and *Oriolus xanthonotus*. Thirdly, why should such birds as *Streptopelia chinensis*, *Geopelia striata* and *Haliastur indus*, as well as those listed in this synopsis under the following numbers: 66, 96, 105, 115, 143, 147, 181, 206, 222, 224, 228 and 229, be so uncommon in the reserve? Fourthly, there are of course a number of species (some birds of prey, including many nocturnal ones, a few uncommon woodpeckers, rare flycatchers and some flowerpeckers) which are erratic in occurrence or hard to see which will very likely be added to the reserve list in due course, including particularly migratory species of Scolopacidae and Laridae.

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